Bay Area 2005 Ozone Strategy

Final Program Environmental Impact Report

December 21, 2005

Volume II

(Appendices)

Prepared for:

Bay Area Air Quality Management District
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APPENDIX A

NOTICE OF PREPARATION

APPENDIX A

CEQA

NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE BAY AREA 2004 OZONE STRATEGY

To: Interested Agencies, Organizations and Individuals

Subject: Notice is hereby given that the Bay Area Air Quality Management District (BAAQMD) will be the lead agency and will prepare an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA), in connection with the project described in this notice. The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) will be responsible agencies for this project under CEQA. This Notice of Preparation is being prepared pursuant to California Public Resources Code § 21080.4 and CEQA Guidelines Section 15082.

Project Title: Bay Area 2004 Ozone Strategy

Project Location: The Ozone Strategy will apply within the jurisdiction of the BAAQMD, which includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties. A map of the BAAQMD is attached to this Notice of Preparation.

Project Descriptions: The proposed Ozone Strategy will address two separate and different sets of air quality planning requirements under State and Federal law. The proposed Ozone Strategy will include stationary source control measures, transportation control measures (TCMs), mobile source control measures and other measures to reduce emissions of the pollutants that form ground-level ozone. Measures may be implemented by the BAAQMD, MTC, ABAG and other parties.

The proposed Ozone Strategy will set forth strategies to make progress toward attainment of the California one-hour ozone standard.

The proposed Ozone Strategy will also provide for maintenance of the national one-hour ozone standard and will include (1) control measures that serve as contingency measures to go into effect if a violation of the national one-hour ozone standard occurs during the maintenance period, and (2) control measures that replace Transportation Control Measure (TCM) 2, a TCM included in the 1982 Bay Area Air Quality Plan, and provide more expeditious emission reductions than those expected from TCM 2.

The BAAQMD is charged under the California Clean Air Act with the responsibility for adopting the elements of the Ozone Strategy addressing state air quality planning requirements. The BAAQMD, along with MTC and ABAG, will collectively adopt the elements of the Ozone Strategy addressing the national one-hour ozone standard and control measures to replace TCM 2. Upon adoption, all elements of the Ozone Strategy will be transmitted to the California Air Resources Board for approval under the requirements of the applicable state and federal clean air acts. Only the elements

addressing the national one-hour ozone standard and the control measures to replace TCM 2 will be transmitted to the U. S. Environmental Projection Agency for inclusion in the state's federal air quality plan called the California State Implementation Plan. A more detailed Project Description begins on the page 3.

Probable Environmental Effects: The project is intended to and expected to benefit public health and the environment by reducing emissions of the air pollutants that form ozone. However, implementation of the control measures described in the project could result in secondary environmental effects if, for example, any means used to reduce these emissions causes impacts to water, air quality, energy, hazards and hazardous materials, noise, public services and transportation.

Response: This notice provides information on the above project and provides you an opportunity to submit comments on potential environmental effects that should be considered in the EIR. If the proposed project has no bearing on you or your agency, no action on your part is necessary. Due to the time limits mandated by State law, your response must be sent at the earliest possible date but ***not later than 30 days*** after receipt of this notice. If you or your agency wishes to submit comments, they may be sent to BAAQMD Senior Planner, Joseph Steinberger, via the contact information below. Individuals or agencies concerned with the environmental effects of the proposed Ozone Strategy may also provide comments in person at a scoping meeting to be held at the following place and time.

Scoping Meeting
MetroCenter
Auditorium
101 8th Street
Oakland, CA
Tuesday, April 20, 2004
9:00 – 11:00 am

Written Comments
JOSEPH STEINBERGER, SENIOR PLANNER
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
Phone: (415) 749-5018 Fax: (415) 749-4741
Email: jsteinberger@baaqmd.gov
DATE: MAY 1, 2004

Jack P. Broadbent
Executive Officer/Air Pollution Control Officer

PROJECT DESCRIPTION

Ozone in the lower atmosphere is an air pollutant that is harmful to humans because it causes respiratory problems. Ozone also reduces crop yields and accelerates deterioration of paints, finishes, rubber products, plastics, and fabrics. In 1979, the United States Environmental Protection Agency (EPA) established a health-based ambient air standard for ozone. This national one-hour ozone standard is set at 0.12 parts per million (ppm) averaged over one hour. California has a separate standard for ozone set at 0.09 ppm, also averaged over one hour. The San Francisco Bay Area air basin is designated as a non-attainment area for the California one-hour ozone standard and is seeking redesignation to attainment for the national one-hour ozone standard.

The Bay Area Air Quality Management District (BAAQMD), in conjunction with the Metropolitan Transportation Commission and the Association of Bay Area Governments, is preparing the Bay Area 2004 Ozone Strategy. The proposed Ozone Strategy outlines a strategy for making progress toward attainment of the California one-hour ozone standard in the Bay Area. The proposed Ozone Strategy is also intended to separately demonstrate continued attainment of the national one-hour ozone standard in the Bay Area. This Notice of Preparation of an Environmental Impact Report addresses the proposed Ozone Strategy.

The San Francisco Bay Area air basin, in which the proposed Ozone Strategy would apply, encompasses all of seven counties—Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara and Napa, and portions of two others—southwestern Solano and southern Sonoma. The BAAQMD is governed by a 21-member Board of Directors, made up of elected officials apportioned according to the population of the represented counties. The Board has the authority to develop and enforce regulations for the control of air pollution from non-vehicular sources within its jurisdiction.

Because ozone is formed through chemical reactions between reactive organic gases (ROG) and nitrogen oxides (NOx) in the presence of sunlight, efforts to reduce ozone seek to limit emissions of ROG and NOx into the atmosphere. In general, ROG comes from evaporation or incomplete combustion of fuels, from the use of solvents in cleaning operations and in paints and other coatings, and in various industrial and commercial operations. NOx is produced through combustion of fuels by mobile sources – cars, trucks, construction equipment, locomotives, aircraft, marine vessels – and stationary sources such as power plants and other industrial facilities.

Exceedances of the California and national ozone standards in the Bay Area have decreased significantly with the regulation and reduction of ozone precursor emissions (i.e. ROG and NOx). This improvement is due to State and national regulations requiring cleaner motor vehicles and fuels, BAAQMD regulations requiring reduced emissions from industrial and commercial sources, as well as programs to reduce the use of motor vehicles.

Proposed control measures in the Ozone Strategy will augment the extensive federal, state, regional and local regulations and programs that are already in place. They may include, but are not limited to, more stringent controls on stationary sources such as

refineries, transportation control measures to reduce vehicle use and emissions, and incentives to reduce emissions from mobile sources.

Attainment of California One-Hour Ozone Standard

The Ozone Strategy will include an assessment of the region's progress toward attaining the California ozone standard and reducing exposure to ozone. The State has not set a deadline to attain the California one-hour ozone standard. The Ozone Strategy will identify "all feasible measures," as required by the California Clean Air Act, for control of ozone precursors that will assist the Bay Area in attaining the California ozone standard and address pollutant transport to downwind regions. The Ozone Strategy will be prepared in accordance with applicable provisions of the California Clean Air Act. It will update the Bay Area 2000 CAP adopted by the BAAQMD Board of Directors on December 20, 2000.

Measures included in the Ozone Strategy are expected to produce environmental benefits by reducing emissions of ozone precursors. The environmental review of the Ozone Strategy will evaluate whether any measures will have secondary adverse environmental impacts, which could occur, for example, through the use of an emission reduction technology that itself may cause some adverse impact. The BAAQMD has prepared a preliminary list of measures that may be included in the Ozone Strategy. The list is likely to undergo further revision as the Ozone Strategy is finalized. Based on the Bay Area's atmospheric photochemistry, control measures that reduce ROG are the most helpful in the expeditious attainment of national and state ozone standards. The preliminary measures would reduce ROG emissions from the emission sources listed below:

- Autobody refinishing
- Refinery wastewater systems
- Refinery flares
- Gasoline bulk terminals and plants
- Graphic arts operations
- High emitting spray booth operations at industrial surface coating facilities
- Loading of marine vessels with petroleum cargos
- Polyester resin operations
- Organic liquid storage tanks
- Refinery pressure relief devices
- Coating of wood products

The environmental review of the proposed Ozone Strategy will also examine the environmental effects of some stationary source measures that reduce NOx emissions. In general, atmospheric models and ambient measurement show that, due to the nature of Bay Area atmospheric photochemistry, reducing Bay Area NOx emissions may increase localized Bay Area ozone levels. However, under some circumstances, reducing Bay Area NOx emissions may reduce ozone levels downwind of the Bay Area. NOx reductions will also help reduce levels of fine particulate pollution in the Bay Area. The

BAAQMD has identified preliminary measures that would reduce NOx emissions from the following sources:

- Boilers, steam generators, and heaters
- Stationary gas turbines

The environmental analysis will also examine the environmental effects from enhancements to the 19 existing transportation control measures (TCMs) in the 2000 CAP listed below. The enhancements include measures to improve rail, bus and ferry service, ridesharing facilities and programs, bicycle and pedestrian facilities, parking programs, smart growth programs, and Spare the Air program enhancements.

- TCM 1: Support Voluntary Employer-Based Trip Reduction Programs
- TCM 3: Improve Local and Areawide Bus Service
- TCM 4: Improve Local and Regional Rail Service
- TCM 5: Improve Access to Rail and Ferries
- TCM 6: Improve Interregional Rail Service
- TCM 7: Improve Ferry Service
- TCM 8: Construct Carpool / Express Bus Lanes on Freeways
- TCM 9: Improve Bicycle Access and Facilities
- TCM 10: Youth Transportation
- TCM 11: Install Freeway / Arterial Metro Traffic Operations System
- TCM 12: Arterial Management Measures
- TCM 13: Transit Use Incentives
- TCM 14: Improve Rideshare / Vanpool Services and Incentives
- TCM 15: Local Land Use Planning and Development Strategies
- TCM 16: Intermittent Control Measure / Public Education
- TCM 17: Construct Demonstration Projects
- TCM 18: Transportation Pricing Reform
- TCM 19: Pedestrian Access and Facilities
- TCM 20: Traffic Calming

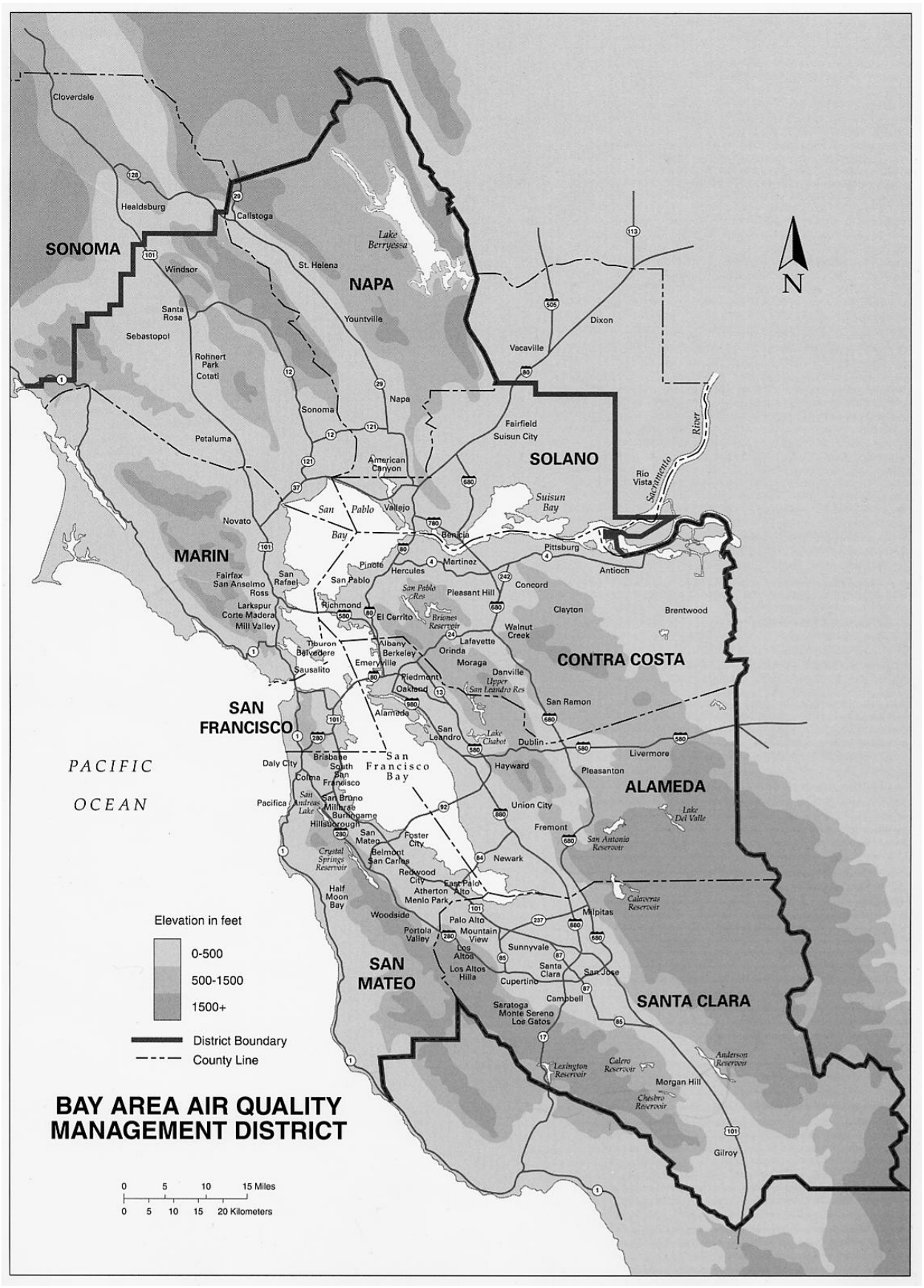
The environmental analysis of the proposed Ozone Strategy will also evaluate mobile source measures that encourage vehicle maintenance and the use of low-emission vehicles, engines, fuels and lubricants (e.g. synthetic motor oil) and reduced idling by trucks and other diesel equipment. It will also examine additional measures that are being considered for inclusion in the proposed Ozone Strategy but do not fit into the previous source categories. These measures include clean air labeling, energy conservation, and public education programs.

Maintenance of National One-Hour Ozone Standard

The Ozone Strategy will also contain a demonstration that the national one-hour ozone standard has been attained, provide for maintenance of the standard, and include

contingency measures to be implemented if a violation of the standard occurs in the future. This portion of the Ozone Strategy will be prepared in accordance with applicable provisions of the federal Clean Air Act.

This portion of the Ozone Strategy will also propose a transportation control measure (TCM) replacement. Federal air quality planning regulations allow for the replacement of existing control measures with other control measures provided the measures achieve emission reductions equal to or greater than the measures being replaced. The environmental review of the Ozone Strategy will examine the proposed measures that would replace TCM 2 (titled "Support post-1983 improvements identified in transit operator's 5-year plans…") in the 1982 Bay Area Air Quality Plan. The proposed replacement of TCM 2 would be accomplished through substitution of measures which meet the emission reduction requirements of TCM 2.


Cloverdale
Healdsburg
Calistoga
SONOMA
Windsor
St. Helena
NAPA
Lake Berryessa
Santa Rosa
Sebastopol
Yountville
Vacaville
Dixon
Rohnert Park
Cotati
Napa
Sonoma
Petaluma
Fairfield
Suisun City
SOLANO
American Canyon
Rio Vista
Sacramento River
Suisun Bay
San Pablo Bay
Vallejo
Benicia
Novato
MARIN
Pittsburg
Martinez
Antioch
Pinole
Hercules
San Pablo
Fairfax
San Anselmo
Ross
San Rafael
Pleasant Hill
Concord
San Pablo Res
Richmond
El Cerrito
Briones Reservoir
Clayton
Brentwood
Larkspur
Corte Madera
Mill Valley
Walnut Creek
Lafayette
Tiburon
Belvedere
Albany
Berkeley
Orinda
CONTRA COSTA
Emeryville
Moraga
Sausalito
Piedmont
Danville
Oakland
Upper San Leandro Res
San Ramon
SAN FRANCISCO
Alameda
San Leandro
Lake Chabot
Dublin
Livermore
PACIFIC OCEAN
Daly City
Brisbane
South San Francisco
Colma
San Francisco Bay
Hayward
Pleasanton
ALAMEDA
San Andreas Lake
Pacifica
San Bruno
Millbrae
Burlingame
Union City
Lake Del Valle
Hillsborough
San Mateo
Foster City
Fremont
San Antonio Reservoir
Crystal Springs Reservoir
Belmont
San Carlos
Newark
Redwood City
East Palo Alto
Atherton
Menlo Park
Half Moon Bay
Calaveras Reservoir
Milpitas
Woodside
Palo Alto
Portola Valley
Mountain View
Sunnyvale
Los Altos
SAN MATEO
Los Altos Hills
Santa Clara
San Jose
Cupertino
Campbell
SANTA CLARA
Saratoga
Monte Sereno
Los Gatos
Lexington Reservoir
Calero Reservoir
Anderson Reservoir
Morgan Hill
Chesbro Reservoir
Gilroy
Elevation in feet
0-500
500-1500
1500+
District Boundary
County Line
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
0 5 10 15 Miles
0 5 10 15 20 Kilometers
N

APPENDIX B

COMMENTS RECEIVED ON THE NOP

COMMENT LETTER 1

Contra Costa County Community Development Department
April 26, 2004

Community
Development
Department

County Administration Building
651 Pine Street
4th Floor, North Wing
Martinez, California 94553-0095

Phone: (925) 335-1278

Contra
Costa
County

Dennis M. Barry, AICP
Community Development Director

April 26, 2004

Joseph Steinberger, Senior Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Steinberger:

This letter is intended to provide our response to the Notice of Preparation for the Bay Area 2004 Ozone Strategy (Ozone Strategy). It includes our comments and input regarding the information that should be included in the scope of the environmental analysis for this project. Staff would also like to express their continued interest to study efforts that have the potential to alleviate both traffic congestion and improve air quality and the public health of Bay Area residents.

It is our understanding that the environmental analysis will study the effectiveness of the Ozone strategy to evaluate both the enhancements to existing TCM and the evaluation of new TCM's, as part of the attainment to the California ozone standard. Additionally the Ozone Strategy will review new TCM's that would replace, and still meet the requirements of, TCM 2 as part of the effort to meet the National 1 hour standard. The County is particularly concerned about the secondary impacts from the proposed revisions to the TCMs. For instance, TCM 3 through 8 provide additional transportation capacity (more rail, bus and HOV facilities) which will support the continued conversion of land to higher intensity uses and impact our natural resources. The Draft EIR should examine the mitigation measures or alternatives to the TCMs proposed the Ozone Strategy that can reduce these secondary effects.

- The Draft EIR should examine the ability of Developer-based trip reduction ordinances to mitigate the secondary environmental effects of land use and development by enhancing the ability of TCM 15 (Local and Land Use Planning and Development Strategies) to further improve air quality. Currently the proposed TCM has the ability to affect land use and planning strategies by addressing the need for local governments to respond to air quality impacts in their jurisdiction by incorporating air quality elements within their General Plans. However, within the proposed TCM there currently is no discussion of encouraging localities to draft Developer-based trip reduction ordinances as part of their planning and development strategies and General Plan policies. Trip Reduction Ordinances have the ability to mitigate several air quality impacts by providing the jurisdictions ability to impose requirements on a developer or property owner to integrate practical facilities (that facilitate walking, bicycling and transit use) and services to the development of their site.

  The implementation of such requirements outlined in the ordinance is a feasible method with which local governments can implement air quality improvements within their General Plan policies. The addition of trip reduction ordinances within the measures addressing land use and development strategies further illustrates the connection between land use, transportation and air quality. The ability of such measures to significantly improve air quality provides the Air District with reasonable authority to implement such measures and/or support other agencies in implementing and monitoring them as part of the Ozone Strategy should those agencies be deemed responsible for such measures.

- The Draft EIR should evaluate the ability of TCM 8 (Construct Carpool / Express Bus Lanes of Freeways) to further mitigate the environmental effects of this measure to improve air quality. The proposed TCM should evaluate the ability of existing and proposed High Occupancy Vehicle (HOV) facilities to have standard occupancy requirements, specifically on Bay Area Bridges and the roadways. Currently TCM 8 discusses the air quality impacts of new HOV lane construction on regional freeways and expressways. However, the measure does not identify the potential air impacts that could be feasibly mitigated by coordinating the operation of existing HOV bypass lanes at the toll plazas of Bay Area bridges with the occupancy and time restrictions of the existing or funded HOV lanes feeding into these toll plazas. The existing HOV occupancy requirements on Bay Area bridges vary with their adjacent HOV lanes at several locations. This variation in occupancy requirement and time restrictions between the road and connecting bridge facilities could potentially adversely impact the ability to reduce mobile source emissions by making it difficult to encourage car/vanpooling in the Bay Area. Therefore the Air District should give serious consideration to revising the occupancy requirements and time restrictions governing the HOV bypass lanes at the toll plazas of Bay Area bridges to match the requirements of the HOV lanes feeding into these toll plazas. This would serve the dual purpose of creating a seamless connection of regional HOV facilities and mitigate the production of nitrogen oxides (NOx), one of the main ozone precursor emissions.

The Air District should carefully study the all feasible mitigation measures and alternatives to the TCM's proposed in the Ozone Strategy. The Air District should take actions within its power to implement such mitigation measures and alternatives and encourage other responsible agencies to take actions that could and should be done in support of the Ozone Strategy and in support of the public's health. This response is provided to support preparation of a complete and adequate EIR for the Ozone Strategy.

Sincerely,

Hillary P. Heard, Transportation Planning Division

c: S. Goetz, CDD

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COMMENT LETTER 2

Law Office of Mark Chytilo
August 30, 2004

LAW OFFICE OF MARC CHYTILO

ENVIRONMENTAL LAW

April 30, 2004
Revised

Mr. Joseph Steinberger, Senior Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

By Mail and Email: Jsteinberger@baaqmd.gov

RE: Comments to CEQA NOP and Preliminary Comments on Scope of BAAQMD 2004 Clean Air Plan

Dear Mr. Steinberger and the BAAQMD:

This office represents Transportation Solutions Defense and Education Fund, an organization that advocates for smart growth and sound planning in the areas of air quality, transportation and land use. This letter is also submitted on behalf of Communities for a Better Environment, a statewide environmental health and justice organization, and Our Children's Earth Foundation. **Please accept this revised letter of this date and discard the previously submitted version.**

Commenters have reviewed the NOP and related issues surrounding the development of the 2004 Clean Air Plan ("CAP") and state implementation plan for maintenance of the one hour ozone standard ("SIP"). In the interest of ensuring that various legal and technical issues are timely addressed in this effort, we are taking this opportunity to address a range of issues that we believe should be addressed and included in the 2004 CAP. Please feel free to contact this office or any of the principals directly should you have any questions.

Generally, commenters believe that a number of requirements of the California Clean Air Act and the federal Clean Air Act have not been addressed in prior CAPs and SIPs, and by this letter, we seek to identify those issues which we request the District and its co-lead agencies devote attention to develop and resolve these issues.

I. CLEAN AIR ACT AND CALIFORNIA CLEAN AIR ACT ISSUES

1. Attainment demonstration

The District has historically declined to prepare an attainment demonstration for its CAPs. It is apparent, from a careful reading of the California Clean Air Act, that there is an implicit

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obligation to prepare an attainment demonstration, and in the absence thereof, the CAP cannot be found legally adequate.

The California Clean Air Act directs that all Bay Area CAPs and SIPs must meet the standards of Health and Safety Code §§ 40717 and 40233, which are accomplished through, *inter alia*, preparation of: 1) an estimate of the emissions reductions from transportation sources **necessary to attain state and federal ambient air quality standards**, Health and Safety Code §§ 40233(a)(1); 40717(b)(1)(emphasis added); and 2) development and adoption of a Transportation Sources Plan on a schedule adopted by each District and including a formal process for review, comment, revision, and potential District oversight of the Transportation Sources Plan implementation. Health and Safety Code §§ 40233(a)(3) and 40717(b)(2-3).

Commenters and the District have previously disputed the meaning of § 40233. Although the case was resolved, we note that a California State court has upheld this interpretation of identical authority applying to the Bay Area Air Quality Management District in *CBE & TRANSDEF v. Bay Area Air Quality Management District & Metropolitan Transportation Commission*, San Francisco County Superior Court, Statement of Decision filed July 24, 2003, page 4 ("The Court finds there has been a violation of Health and Safety Code § 40233 [analogous to § 40717]. . . . [There] is a shortfall of [emissions reductions necessary to meet the attainment emissions inventory] of 26 tons of VOC emissions per day. [Respondents] are ordered within 60 days from notice of entry of order to develop a plan for public review that reduces VOC by an additional 26 tons per day.").

Thus this authority establishes that Districts must undertake an attainment demonstration process sufficient to estimate emissions reductions from transportation sources necessary for attainment, which implicitly mandates an attainment demonstration of some type modeling all sources.

2. TCM Plan

Commenters believe that the specific elements and requirements of Health and Safety Code § 40233 apply to the adoption of this CAP and maintenance plan and we thus implore the District and its co-lead agencies to fully and faithfully observe all such requirements.

3. Reasonably Available Transportation Control Measures

The California Clean Air Act directs Districts to "**focus particular attention on reducing emissions from transportation and areawide emissions sources.**" Health and Safety Code § 40910, emphasis added. While we applaud recent strides by the District and its co-lead agency MTC to promote Smart Growth principles and enhance public transit opportunities, commenters believe that more can be done to more forcefully leverage the public transportation funding process to provide more definite incentives for Smart Growth and use of public transit and to dis-incentivize single occupancy vehicle use and sprawl.

We believe that a potentially useful objective may be modeled after a portion of the federal Clean Air Act applying to severe and above areas. 42 U.S.C. § 7511a(d)(1) directs that areas develop SIP revisions containing separate TCMs sufficient to independently offset any growth in emissions from increases in VMT and numbers of vehicle trips.

In addition, there are numerous pollution control measures that are required by other air districts that were not put in the 2001 Ozone Attainment Plan. These measures are obviously "reasonable available." CBE made extensive comments related to this during the public comment periods for the 2001 Ozone Attainment Plan. (This letter incorporates CBE's July 16, 2001 comments on the BAAQMD/MTC/ABAG Proposed Final Ozone Attainment Plan (June 2001 version)).

4. Air Pollution Transport

The District has an obligation under state and federal law to quantify and resolve transport issues such that all areas in the State attain the state standard "by the earliest practicable date," Health and Safety Code § 40913(a), and the federal standards "as expeditiously as practicable" 42 U.S.C. § 7502(a)(2)(A), "within the entire geographic area comprising such State." 42 U.S.C. § 7407(a). Merely complying with ARB's transport mitigation regulations does not meet these standards.

Not only has the Legislature expressly mandated that CAPs "focus particular attention on reducing emissions from transportation and areawide emissions sources," Health and Safety Code § 40910, but TCMs are particularly important for transport mitigation due to their disproportionate NO_x emissions reductions. The District argues that it is VOC limited, so its control strategies generally do not focus on NO_x emissions reductions. However, NO_x emissions reductions to address transport may affect ozone attainment, so the complex issue must be expressly and qualitatively addressed, not avoided, in the 2004 CAP and SIP. In fact, EPA rescinded the District's NOx waiver in 1997, stating, "It is clear, upon final redesignation of the Bay Area to nonattainment based on subsequent violations of the Ozone NAAQs, that the basis for granting the original NOx waiver no longer exists." 62 Fed.Reg. 66578 (Dec. 19, 1997) Thus, all reasonable available NOx controls should be included.

5. Long Term TCM Benefits

We note that many agencies discount TCMs in their attainment strategies on the basis of perceived limited immediate emissions reductions. It is our opinion that TCMs can be substantially more effective at gaining emissions reductions than current methodologies credit, and further that the long term air quality benefits of transit and Smart Growth TCMs offer substantial cumulative air pollution control benefits, such as through slowed rates of VMT growth. Regardless of the actual immediate benefits, the California Clean Air Act mandates RATCMs "sufficient to substantially reduce the rate of increase of passenger vehicle trips and

miles traveled per trip" for moderate areas and above, and thus must be a component of most CAPs anyway. Health and Safety Code § 40918(a)(3).

6. Justification of HOV Network as TCM

We note that the District has previously denoted high occupancy vehicle lane networks as a potential TCM. We question, however, whether HOV networks are appropriate as TCMs, since numerous studies show them to be air quality neutral at best and they typically increase highway capacity and induce further VMT while discouraging more systematic solutions, such as regional- and commute-focused public transit.

7. Contingency measures

The CAP and SIP must contain, respectively, contingency measures sufficient to implement in the event of a finding by ARB pursuant to Health and Safety Code § 41503.3 or in the event of a one-hour ozone violation, 42 U.S.C. § 7502(c)(9).

The past practice of simply including ARB state tailpipe standards or other impending controls as contingency measures is not appropriate. By statute, federal contingency measures are to be automatically applied if the area fails to meet a milestone, implicitly to allow the area to "catch up" from unanticipated violations. Reciting the eventual adoption of tighter tailpipe and other statewide standards cannot serve this purpose, and thus the CAP and SIP must identify and adopt a new generation of genuine contingency measures for the Bay Area.

8. TCM Substitution

The NOP is not clear how the District and MTC intend to accomplish the so-called "TCM substitution." Since this is identified in this SIP revision process, presumably the TCM substitution will be addressed as a potential SIP revision. If the agencies are intending to proceed with a TCM substitution under other authority or a different process, this should be clearly stated in the relevant documentation, including the NOP.

9. VMT Growth Rate Reduction

The Act requires all areas moderate and above to include all reasonably available transportation control measures ("RATCMs") in state CAPs to "substantially reduce the rate of increase in passenger vehicle trips and miles traveled per trip." Health and Safety Code § 40918(a)(3). Most California Air Pollution Control Districts and CAPs, including the Bay Area, fail to achieve the VMT growth rate performance standard. The 2004 CAP must specifically address the RATCM standard and achieve the applicable VMT growth standards imposed by statute. Any action on the CAP and SIP should acknowledge and observe the District's CEQA Guidelines which address regional VMT growth expressly.

10. Redesignation Issues – Zero Threshold for Permitting

The District should consider requesting redesignation to the "extreme" classification under the California Clean Air Act (CCR 70306(b)), or otherwise adopting the "no net increase" permitting program with a zero threshold. Health and Safety Code § 40918.5. The CAP is required to reduce the threshold currently, thus an alternative that must be examined is reducing the no net increase permitting threshold to zero.

11. Timing Issues

The Clean Air Plan was supposed to be adopted in 2003, but has been delayed, presumably for the Central California Ozone Study data necessary to model attainment and quantify transport contributions and thereby select the most effective control strategies. Nevertheless, the Bay Area has been denied the benefit of this revised CAP's control strategies and emissions reductions from the delay that has occurred. Commenters request that the CAP examine potential means to rectify the lost progress from this year's delay.

II. CEQA ISSUES

The NOP contends, and the District's position in litigation has been, simply, that only the potential impacts of control measures must be considered in the EIR. Commenters contend that this simplistic analysis fails to comport with CEQA's legal standards of adequacy, and more importantly, fails to apprise decisionmakers and the public of the true consequences and alternatives to the proposed project. We encourage the District to broaden the scope of the EIR to ensure that cumulative effects and the public health effects of the chosen control strategy are disclosed, along with alternatives that might avoid some of the impacts to public health if attainment is achieved more quickly, and/or with a greater margin of safety. (*See, e.g., Communities for Better v. California Resources Agency*, 103 Cal.App.4th (2002) 98, 116-123).

There can be other environmental consequences from the CAP's adoption and implementation, for example, sprawl resulting from excessive future Motor Vehicle Emissions Budgets with attendant conversion of lands and increased traffic congestion, "Smart Growth" from certain transportation control measures with attendant increases in transit system productivity, reduced development pressure and thus preservation of rural and open space lands, and the effects of non-criteria pollutants upon particular communities, such as toxics from cumulatively increased diesel emissions traffic and entrainment/re-entrainment of road-based hazardous particulate matter

1. Scope of Impact Issues

Commenters believe that the CEQA document must address the full range of impacts associated with the District's exercise of discretion in this matter. The analysis must consider not only what control strategies are in the preferred project, but also what control strategies are not (which should be the list of control strategies included in an alternative project) and which, if included, could accelerate attainment and provide more expeditious attainment and protected public health. Since one purpose of the CAP is to achieve and maintain the California ambient air quality standard for ozone, the project is essentially focused on remediating a currently unhealthful environmental condition. "Exposure of sensitive receptors [there are millions of Bay Area asthma suffers, and millions of children and elderly individuals, each of whom is considered a sensitive receptor for ozone exposure] to substantial pollutant concentrations" is a significant impact. CEQA Guidelines, App. G, III. Every day that the area exceeds an ambient air quality standard, the ozone concentration is "substantial." This represents a significant impact as it exceeds the level that the Air Resources Board established as causing adverse health effects and the Legislature has determined should be attained "by the earliest practicable date."

Given the narrow margin of attainment (see below), the EIR must identify the potential environmental consequences of exceedences during the 2004 ozone season. These consequences include highway sanctions and conformity lapse, either of which could affect the region's receipt of federal transportation funds. These funds, and the projects they support, may have been identified and relied upon as mitigation measures for other projects (such as large development projects). The direct and indirect effects of having the CAP/SIP "aim too low" and cause continuing human exposure and other consequences must be examined.

2. Baseline Issues

Ordinarily, the CEQA baseline is the present or reasonably foreseeable conditions that would occur without the project. Commenters believe that the normal baseline for purposes of preparation of a CAP and/or SIP is timely (and for nonattainment areas that have missed attainment dates including the Bay Area, timely refers to the statutory date for attainment) compliance with the ambient air quality standards, and by assuming this baseline, the environmental review document must articulate and address the effects of the delayed compliance with the standard, and the significant impacts to human health and economic productivity from unhealthful ambient air quality in the interim.

The baseline issue should also provide an empirical evaluation of the economic and emissions activity during the period of attainment. Commenters have provided independent evidence to EPA and the District that the Bay Area experienced a dramatic economic recession during the period of attainment that does not reflect the region's ordinary economic, and thus emissions activity. The previous determination of attainment and redesignation to maintenance was predicated on a prior period of economic downturn, and the past experience creates an obligation on the District to examine the basis for the baseline assumptions of one hour federal ozone standard attainment in the environmental review document.

3. Alternatives Analysis

The EIR's alternatives analysis must identify and compare a range of CAPs with various attainment dates and different levels of margin of safety in demonstrating attaining and/or maintaining the respective standard. This is particularly important for the maintenance plan/SIP, as the margin of attainment is extremely small, both in ozone concentration and number of exceedence days. This narrow margin increases the probability that the region will exceed the federal one hour ozone standard during the 2004 ozone season, preventing redesignation. The EIR should examine more aggressive control strategies as an alternative that would provide a greater margin of safety to protect public health and increase the likelihood that the region will maintain its federal maintenance status.

4. TCM Substitution

The NOP is incomplete due to the failure to describe the process and authority by which the District and MTC intend to accomplish the so-called "TCM substitution." Further, the NOP fails to identify the proposed substitute TCMs, and thus public comment is incomplete. Depending on the substitute TCM proposed, there is the possibility of collateral impacts, such as increased VMT, disproportionate emissions effects on particular communities, higher particulate matter emissions, induced traffic, etc. Transit ridership increases have a particular set of community benefits, including Environmental Justice consequences, that must be considered and expressly addressed through the substitution process, including evaluation in the environmental review document. The NOP is not complete and thus should consider the TCM substitution process to involve a potentially significant impact.

5. Secondary Impacts

The District's overall control strategy may itself cause potentially significant impacts, such as by pursuing a VOC only control strategy and not controlling NO_x emissions that are more prone to be transported as an ozone precursor and contribute to downwind nonattainment. The proposed control strategies will affect toxic emissions ratios, diesel emissions and particulate matter attainment strategies. The environmental review document must examine the effect of the CAP/SIP on these other pollutants, and identify alternatives that can avoid any significant impacts, and mitigate those that cannot be avoided. Environmental Justice issues must be specifically addressed, as many control strategies affect the spatial and temporal distribution of air pollutants to the detriment of individual neighborhoods and communities.

Commenters acknowledge and appreciate the District's ongoing efforts to control air pollution and improve air quality, but believe that important requirements of the Federal and California Clean Air Acts were not properly addressed. Importantly, the CEQA environmental review process may either serve as a useful adjunct to assist the air quality planning process through

expansive alternatives analysis and mitigation measures, or it may continue as a perfunctory process with little benefit to decisionmakers or the public. Much more remains to be done in the efforts to provide for healthful air quality for all Bay Area residents and visitors, and we encourage the District to use the CEQA process as a means to improve the quality of the CAP and SIP and answer lingering questions in the community over the District's commitment to aggressive air pollution control.

Thank you for your consideration of our views in this important issue.

Sincerely,

LAW OFFICE OF MARC CHYTILO

By: Marc Chytilo

CC: Mr. Jack Broadbent, BAAQMD
Ms. Kathleen Walsh, BAAQMD
Ms. Debbie Jordan, EPA
Mr. Will Rostov, CBE
Ms. Tiffany Schauer, OCE
Mr. David Schonbrunn, TRANSDEF

COMMENT LETTER 3

Communities for a Better Environment

BAY AREA 2004 OZONE STRATEGY ENVIRONMENTAL IMPACT REPORT SCOPING MEETING

COMMENT FORM

If you or your agency wishes to submit comments, they may be sent to BAAQMD Senior Planner, Joseph Steinberger, via the contact information below. Comments must be received by May 7, 2004.

COMMENTS:

(1) Include analysis of transport's effects in downwind areas (Central Valley) in the EIR.

(2) Include analysis of factors that contributed to the mistaken conclusion that the ozone standard was met (in the 1990s), such as economic conditions, weather variability, etc., & whether these factors cause uncertainty in present projections of compliance, in the EIR.

CONTACT INFORMATION:

Name: Greg Karras, Communities for a Better Environment

Address: 1611 Telegraph Ave., Suite 450 City: Oakland Zip: 94612

Phone: (510) 302 0430 Fax: (510) 302-0437

Email: GKARRAS@CBECAL.ORG Affiliation: CBE

Please leave this in the comment box or send to:
Joe Steinberger, BAAQMD, 939 Ellis Street, San Francisco, CA 94109
Email: jsteinberger@baaqmd.gov Fax: 415-749-4741

BAY AREA AIR QUALITY MANAGEMENT DISTRICT · METROPOLITAN TRANSPORTATION COMMISSION · ABAG

COMMENT LETTER 4

California Department of Transportation
May 4, 2004

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

Flex your power!
Be energy efficient!

May 4, 2004

ALAGEN201

Mr. Joseph Steinberger
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Steinberger:

BAY AREA 2004 OZONE STRATEGY – NOTICE OF PREPARATION

Thank you for including the California Department of Transportation in the early stages of the environmental review process for the Bay Area 2004 Ozone Strategy project. Please send two copies of the Draft Environmental Impact Report to the following address as soon as it is available:

Patricia Maurice, Associate Transportation Planner
Office of Transit and Community Planning, Mail Station 10D
California DOT, District 4
111 Grand Avenue
Oakland, CA 94612-3717

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov for more information, or with any questions regarding this letter.

Sincerely,

Timothy C. Sable

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

COMMENT LETTER 5

MTC; Robert Huang
May 6, 2004

Joseph Steinberger

From: Robert Huang [rhuang@mtc.ca.gov]
Sent: Thursday, May 06, 2004 4:56 PM
To: Joseph Steinberger
Cc: Harold Brazil
Subject: Comment on TCM 13

Joe,

Here are my comments:

Bullet 3 of **Description** for TCM 13 (p E-20):

Under this bullet should be a description of both pre-tax and employer-subsidized transit voucher options. In fact, since 1998, an increasing number of employees are taking advantage of the pre-tax incentive as they become aware of this tax break and as employers pull back from providing full transit subsidies. Commuter Check is one of several vendors that cater to this market. If you want to mention Ecopass, you should also mention the joint program between AC Transit and UC Berkeley that allows all UC students to ride AC bus free since the paid for it from their registration fees.

Under **Cost** on page E-21:

There was no description of RTC in Description. The cost of $400,000 is no longer valid; MTC is no longer directly involved with Commuter Check and RTC. Muni manages and operates the RTC; Commuter Check manges its own operation.

If you have any questions, call me at 510/464-7825.

Robert Huang

COMMENT LETTER 6

Monterey Bay Unified Air Pollution Control District
May 3, 2004

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

May 3, 2004

Jack Broadbent
Executive Officer
Bay Area AQMD
939 Ellis St.
San Francisco, CA 94109

SUBJECT: NOP FOR DEIR FOR BAY AREA 2004 OZONE STRATEGY

Dear Mr. Broadbent:

Staff has reviewed the referenced document and has the following recommendation for the air quality impact analysis as it relates to the North Central Coast Air Basin:

- The impact of the strategy on downwind ozone levels in the North Central Coast Air Basin should be assessed.

Please do not hesitate to call if you have any questions.

Sincerely,

Janet Brennan

Janet Brennan
Supervising Planner
Planning and Air Monitoring Division

COMMENT LETTER 7

AC Transit
May 6, 2004

1600 Franklin Street, Oakland, CA 94612 - Ph. 510/891-4716 - Fax. 510/891-7157

Joseph Steinberger
Senior Planner
Bay Area Air Quality Management District
939 Ellis St.
San Francisco, Ca. 94109

May 6, 2004

Subject: Notice of Preparation of Draft Environmental Impact Report for the Bay Area 2004 Ozone Strategy

Dear Mr. Steinberger:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the Environmental Impact Report (EIR) on the Bay Area 2004 Ozone Strategy. The Ozone Strategy will set forth how the region plans to meet state and federal requirements concerning ozone. The Strategy will describe the actions needed from Bay Area regional agencies--the Air Quality district, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The Strategy will regulate both stationary and mobile transportation sources.

The Notice of Preparation for the Ozone Strategy states that the EIR will evaluate enhancements to 19 of the 20 Transportation Control Measures (TCMs) set forth in the 2000 Clean Air Plan. This effort will be critical to the success of any air quality improvement plan. As the Air Quality district has often stated, motor vehicles are the largest source of air pollution in the Bay Area.

We note that Transportation Control Measure 2 has been deleted. This measure called upon MTC as a responsible agency under the California Environmental Quality Act to "Support post-1983 improvements identified in transit operators' 5 year plans." Our response to this change is discussed later in the letter.

AC Transit believes that the Bay Area must have an effective, adequately funded program to shift travel from single occupant vehicles to transit and other travel modes that minimize air pollution. This requires a strong and stable transit network to realize **TCM 3--Improve Local and Regional Bus Service.** It will require leveling the transportation "playing field" that currently favors automobile drivers through measures such as **TCM 13--Transit Use Incentives** and **TCM 18--Transportation Pricing Reform.** This effort will require restructuring Bay Area land use so that it is transit-friendly rather than transit-hostile, as recognized in **TCM 15--Local Land Use Planning and Development Strategies.** It will require continued development of a transit system that serves all user groups, as indicated by **TCM 10--Youth Transportation.** Development of the transit-related TCMs, such as those we have listed above, must be done in close consultation with AC Transit and other transit operators. In this way, the Air District can formulate a program that is grounded in the realities of Bay Area transit .

Before the current recession, transit ridership was growing in the Bay Area, for the first time in decades. However this growth did not reach the full potential for transit ridership here. In our view, there are elements of Bay Area transportation and air quality policy that must change in order to realize more ridership growth. Key items that the TCMs should address include the following:

- Although the balance has shifted somewhat, regional transportation investment has historically focused heavily on long distance trips. However, the bulk of trips in the region are under five miles, with consequent pollution.

- Major investments have been made in long distance services without requiring smart growth and compact development.

- TCM 5 calls for improved access to rail and ferry service, yet many transit passengers must pay an additional fare to transfer, while most auto drivers receive free parking at transit stations. This clearly creates a disincentive to use transit.

- The on-street environment for bus passengers is often poor. Yet there is no general funding source for passenger amenities, and often such improvements must be funded by advertising. In addition, some communities resist the addition of passenger amenities. Poor conditions discourage passengers from riding.

- Perhaps the most critical issue is identifying a stable source of funds for transit--especially operating funds--so that transit agencies are not forced to contract or expand services with the economy. These issues should be addressed in formulating the TCMs.

A realistic, comprehensive program for making transit improvements and increasing transit ridership would capture the spirit and thrust of the deleted TCM2. On the other hand, if the remaining TCMs are not adequately conceptualized, funded, and implemented, then the absence of TCM 2 will be sorely felt. AC Transit is concerned more with the effectiveness of the Transportation Control Measures in shifting travelers' modes and increasing transit ridership than with the particular language that is used.

Thank you for your interest on our comments. If you have any questions about them please contact Nathan Landau, Long Range Planning Division, 510/891-4792.

Yours Truly,

Nancy Skowbo
Acting Deputy General Manager for Service Development

cc. Rick Fernandez
Nathan Landau
Ken Scheidig
Tina Spencer
AC Board of Directors

COMMENT LETTER 8

Santa Clara Valley Transportation Authority
May 18, 2004

SANTA CLARA
Valley Transportation Authority

May 18, 2004

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Attention: Joseph Steinberger

Subject: Bay Area 2004 Ozone Strategy

Dear Mr. Steinberger:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the NOP for the Bay Areas 2004 Ozone Strategy. We have the following comments.

VTA supports Transportation Control Measures that encourage, promote, and increase the use of alternative travel modes of transportation.

We appreciate the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

RMdh

SANTA CLARA
Valley Transportation Authority

May 18, 2004

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Attention: Joseph Steinberger

Subject: Bay Area 2004 Ozone Strategy

Dear Mr. Steinberger:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the NOP for the Bay Areas 2004 Ozone Strategy. We have the following comments.

VTA supports Transportation Control Measures that encourage, promote, and increase the use of alternative travel modes of transportation.

We appreciate the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

RM:kh

N:\BAAQMD let 5 18 04.doc
3331 North First Street - San Jose, CA 95134-1906 - Administration 408.321.5555 - Customer Service 408.321.2300

COMMENT LETTER 9

Sacramento Metropolitan Air Quality Management District
May 6, 2004

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Norm Covell
AIR POLLUTION CONTROL OFFICER

May 6, 2004

Joseph Steinberger, Senior Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Sir:

Thank you for sending a copy of your Notice of Preparation of the Draft Environmental Impact Report (DEIR) for the Bay Area 2004 Ozone Strategy, and for your agency's ongoing participation in meetings to resolve ozone transport issues. We look forward to continuing this dialogue. We hope that it will lead to agreement on the ozone transport control measures that should be included in your Ozone Strategy. Below we provide our specific recommendations for your DEIR.

A) Summary

The DEIR summary must list the, "Areas of controversy known to the lead agency." (CEQA Guidelines, sec. 15123.)

The BAAQMD and the SMAQMD have made great strides over the last year in resolving differences over the ozone transport issue. (See Attachments 2 - 5.) The planning process for the Ozone Strategy provides us with yet another forum for continuing this progress. We appreciate that the NOP both acknowledges the transport issue, and identifies some measures to reduce ozone transport. Every measure you adopt will be another important step forward. However, if at the time the DEIR is published, there remain differences of opinion between the BAAQMD and SMAQMD regarding the nature or extent of ozone transport, or the list of "all feasible measures" that should be included in the Ozone Strategy to reduce transport, these differences should be noted in the DEIR summary.

B) Project Description

The project description section of an EIR includes, "A statement of objectives sought by the proposed project." (CEQA Guidelines, sec. 15124.) Please include as objectives of the Ozone Strategy, "The approval of all feasible control measures to mitigate ozone transport, and the approval of a schedule for their prompt adoption."

The project description in the DEIR should include a list of your proposed air pollution control measures. The project description should indicate which control measures will be

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implemented to make progress toward meeting the California 1-hour standard, which measures will provide for maintenance of the national 1-hour ozone standard, and which measures will serve as contingency measures. We have reviewed the preliminary draft control measures posted on your website, and provide specific comments below.

1) Preliminary TCMs

Your proposed control measures include enhancements of your TCM program. In general, it is an impressive list of TCMs that reflects a strong collaboration among BAAQMD, MTC, ABAG and transit providers throughout your region. Nevertheless, the list of TCMs does raise a couple of concerns on our part.

At this early stage of measure development, it is understandable that you have not calculated the emission reduction potential of the measures. As your analysis of the measures continues, we hope that it reveals significant emission reductions.

TCM 15 deals with local land use planning and development strategies. Your background discussion of TCM 15 states that, "TCM 15 responds to the indirect source requirements of the CCAA." (Draft Bay Area 2004 Ozone Strategy, March 16, 2004, p. E-22.) The California Air Resources Board issued a guidance document for the development of indirect source control programs in 1990. That document recommends that air districts adopt criteria to ensure that indirect source mitigation measures must:

- "be actually implemented:
- result in a new or enhanced program;
- have continued effectiveness;
- be legally binding; and
- be reasonably quantifiable." (CARB, California Clean Air Act Guidance for the Development of Indirect Source Control Programs, p. 4.)

TCM 15 includes a few grant programs that have a high likelihood of achieving emission reduction. Unfortunately, TCM 15 places a great deal of emphasis on actions that MTC, ABAG, BAAQMD, and local governments "could take," "could develop", "should prepare," "should assure," or "encourage". In other provisions, TCM 15 merely commits ABAG, MTC, and BAAQMD to "consider," "monitor," "examine," and to "explore." (Draft Bay Area 2004 Ozone Strategy, March 16, 2004; Page E-22 – E-24.) This language does not ensure that the measures will be actually implemented. Furthermore, many of the policies lack quantified objectives at which the implementing agencies can aim to achieve, and agree to be held accountable.

Other air districts are taking a more direct approach to reducing emissions from indirect sources. For example, our Land Use Mitigation program tracks CEQA projects from planning through implementation to secure quantified emission reductions. We are working on a Construction Mitigation Indirect Source Rule to reduce construction equipment emissions even more effectively. We will also be developing a Land Use Mitigation Indirect Source Rule. In its 2002 and 2005 ROP, the San Joaquin Valley

Unified Air Pollution Control District committed to adopting an Indirect Source Rule to reduce the impact of emissions from new development. (SJVUAPCD, Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone, December 31, 2002, Table 4-3, p. 4-7; See Attachment 6.) We hope that your final version of TCM 15 will take a more direct approach to indirect source control.

2) Preliminary Stationary Source Measures

We realize that you did not have the time to fully consider and incorporate our February 18, 2004 proposed control measures into your March 16, 2004 report, Preliminary Draft Control Measures Descriptions. Thus, we are encouraged by the fact that, in some form, 8 of our proposed stationary source control measures are present on your list. This is a good start, and reflects that we are both thinking along the same lines. We hope that the rest of our proposed measures will ultimately become part of your Ozone Strategy.

With regard to those measures you have analyzed in your report, we have a few suggestions. Please consider a measure to control petroleum refinery flare emissions that sets prescriptive standards, such as measure B-1 from our February 18 materials. With regard to your control measure for gas turbines, please consider a provision to control emissions from gas turbines 2.9 – 10 MW in size. Finally, with regard to organic liquid storage tanks, please give further consideration to requiring that fixed roof tanks storing organic liquids with vapor pressures greater than 0.1 psia be vented to control devices with efficiencies of 95% or greater.

C) Environmental Setting

The environmental setting section must describe the physical environmental conditions in the vicinity of the project, to the degree necessary for an understanding of the significant effects of the proposed project and its alternatives. (CEQA Guidelines, sec. 15125, subd. (a).) In this section of the Ozone Strategy DEIR, please describe the current non-attainment status of the Sacramento air basin, the current contribution of ozone transport from the Bay Area, and the climate and topography that influence this transport. (BAAQMD CEQA GUIDELINES, p. 27.)

Should any inconsistencies arise between the proposed Ozone Strategy and the State Implementation Plan, they should also be disclosed in this section. (CEQA Guidelines, sec. 15125, subd. (c).)

D) Discussion of Significant Environmental Effects

A lead agency faces a number of thresholds of significance when assessing impacts to air quality. One threshold question is whether the project will conflict with or obstruct the implementation of an air quality plan. Another threshold question is whether a project will contribute substantially to an existing or projected air quality violation. In considering these questions, the lead agency must also evaluate effects that are indirect,

long-term, or cumulative. Impacts during all phases of the project must be considered. (CEQA Guidelines, secs. 15126.2, subd. (a); 15130; 15126.)

It remains our hope that your Ozone Strategy will include the approval of all feasible measures to reduce ozone transport, and a prompt schedule for their adoption. However, if the Ozone Strategy does not include the approval of all feasible measures, and a prompt schedule for their adoption, it will obstruct the successful implementation of plans to attain State and Federal air quality standards in the Sacramento region, it will contribute to projected air quality violations in the Sacramento region, and it may extend the number of years that these adverse conditions persist. These would constitute significant impacts warranting analysis in the DEIR.

E) Mitigation Measures

ARB's report on Ozone Transport Mitigation lists 28 source categories for which feasible control measures have been identified. The report goes on to list the 11 specific source categories that district and ARB staffs have been discussing through the Northern California Air Quality Coordinating Group. (Attachment 7, pp. 6 & 9.) Your proposed control measures address only 6 of these 11 source categories. We hope that you will also consider control measures to lower VOC limits for adhesives, degreasing, and solvent cleaning; and to regulate stationary internal combustion engines (including diesel) between 50 and 250 horse-power.

The materials we provided to the BAAQMD in February included 38 measures to mitigate the impacts of ozone transport. (See Attachment 2 & enclosed CD.) It appears that your staff has included, in some form, at least 11 of these control measures (8 stationary measures & 3 TCMs) in its analysis of preliminary draft control measures for your Ozone Strategy. (Bay Area 2004 Ozone Attainment Strategy, Preliminary Draft Control Measure Descriptions, March 16, 2004, pp. 1-2.) This is a very promising start, and we greatly appreciate your cooperation in this matter. We hope that the rest of our proposed measures will ultimately become part of your Ozone Strategy. The BAAQMD should discuss each of these measures in the DEIR, and should identify the basis for selecting particular measures. (CEQA Guidelines, sec. 15126.4, subd. (a)(1)(B).)

Should you deem any of the 38 measures to be infeasible, such a finding must ultimately be supported by substantial evidence in the record. (CEQA Guidelines, sec. 15091.) Should you come to your infeasibility conclusion early in the CEQA process, please consult with us as soon as possible. This is consistent with the CEQA direction emphasizing early consultation. (CEQA Guidelines, sec. 15006, subd. (k).)

F) Alternatives

CEQA requires that the DEIR consider a reasonable range of alternatives that would attain most of the project objectives, but would lessen the significant impacts of the project. The range of alternatives must be sufficient to foster informed decisionmaking and public participation. Alternatives may be more costly than the project, and they may

impede, to some degree, the attainment of project objectives. (CEQA Guidelines, sec. 15126.6.) Please consider an Ozone Strategy or alternative that includes as many of our 38 proposed control measures as are feasible. When you evaluate the impacts, please provide a quantitative comparative analysis of the project description and its alternatives.

Thank you again for the opportunity to provide scoping comments. We look forward to continuing the dialogue regarding ozone transport mitigation. If you have any questions, please feel free to contact me by phone at (916) 874-4834, or by e-mail at gtholen@airquality.org.

Sincerely,

Tom DeBusine, for

Greg Tholen
Environmental Coordinator

cc.
Norm Covell, APCO, SMAQMD
Brigette Tollstrup, Division Manager, SMAQMD

LIST OF ATTACHMENTS

1) 5/22/03 SMAQMD letter to ARB regarding Ozone Transport Mitigation Regulations

2) 2/18/04 Summary Chart of BAAQMD Measures provided by SMAQMD

3) 2/18/04 Schubert, et al., Summary of Control Strategies for San Francisco Bay Area Federal Nonattainment Area.

4) 3/3/04 Letter from BAAQMD to SMAQMD

5) 3/5/04 Letter from SMAQMD to BAAQMD

6) 12/31/02 Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone, p. 4-7.

7) 4/8/04 ARB, Ozone Transport Mitigation in California

ENCLOSURE

CD with zipped files of BAAQMD Measures provided by SMAQMD

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

COPY

ATTACHMENT 1

Norm Covell
AIR POLLUTION CONTROL OFFICER

May 22, 2003

Clerk of the Board
California Air Resources Board
P.O. Box 2815 Sacramento, CA 95812

RE: Ozone Transport Mitigation Regulations

Dear Chairman Lloyd and Members of the Board;

The Sacramento region urgently needs every available emission reduction to meet the national ambient air quality standard for ozone by 2005 and to make expeditious progress towards attaining the state ambient air quality standards for ozone. This includes reductions from our upwind neighbors.

Our District both generates and receives transported emissions. We expected these regulations to provide reductions needed to meet Sacramento's clean air goals, and to help neighbors downwind of Sacramento.

We support ARB requiring mitigation of reactive organics and nitrogen oxides as ozone precursor pollutants. We also appreciate ARB's steps to improve the 'all feasible measures' process. However, the proposed regulation provide almost no new emission reductions and does little to forward attainment of either the state of federal ambient air quality standards in the Sacramento or other areas.

Mitigation of transport impacts

The Staff Report for this regulation estimates an emission benefit from the New Source Review requirements in the San Francisco Bay Area of 0.09 tons per day (tpd) reactive organics and 0.05 tpd of nitrogen oxides. This is approximately 0.01% of the ozone precursor emissions inventory (over 1150 tons per day) in the San Francisco Bay Area.

The Staff Report states, "*amendments for all feasible measures are expected to result in new emission reductions.*" The report identifies no new feasible measures to be adopted, however, and therefore provides no basis for this statement. As the report acknowledges, areas are already subject to the "all feasible measures" requirement. The regulation does not impose new requirements, so no additional reductions can be expected.

We have and continue to support the cooperative, interdistrict approach to evaluating feasible measures. Districts have shared information regarding our assessments and

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are meeting to discuss a process for reaching consensus on feasible reduction strategies. I am hopeful that these discussions will result in substantive emission reduction commitments. Nevertheless, we believe the statute requires ARB to take a proactive approach to requiring mitigation of upwind emissions. ARB is required to establish mitigation requirements because the state is responsible for balancing the competing interests of upwind and downwind districts.

We have provided our assessment of opportunities for additional reductions mitigating transport impacts from the Bay Area to the BAAQMD and your staff[1]. These requested rule changes were not included in this proposed regulation and the Staff Report does not discuss the feasibility of those requests. Yet the development of the triennial report and mitigation regulations is precisely the point at which the legislature has instructed ARB to intervene and identify feasible measures for adoption by upwind districts.

Federal ozone planning efforts

ARB acknowledges that emissions in upwind areas impact the ability of downwind areas to meet federal standards and states that California addresses the establishment of upwind mitigation measures through this triennial transport process. ARB also asserts that by doing so, the emission reductions achieved through the state transport analysis will be reflected in the emissions baseline to be used in future federal plans in the downwind areas.

Unfortunately, the ARB has not identified new mitigation measures, and so there is no basis for asserting that the state process has substantively addressed transport under either state or federal law. As a result, when downwind areas prepare their federal plans, they will have to impose additional measures in their regions to offset the emissions from sources in the upwind districts -- sources that in some cases, are already subject to less stringent controls than their downwind counterparts.

State responsibility for mitigating transport

We reiterate our request made at the workshop that the following measures be required by this transport mitigation regulation.

1) ARB should work with the Governor's office to secure an Executive Order requiring a) all state agencies include preferences for using vendors who have low emission vehicles and equipment when contracting for goods and services and b) construction work performed using state equipment or under state contracts meet a fleet average emission rate that is 20% below the inventory fleet average for NOx and 45% below the inventory fleet average for PM. At a minimum, ARB has the authority to implement these policies within the ARB contracting process.

[1] Norm Covell correspondence to Catherine Witherspoon, Workshop on Ozone Transport Regulations, March 13, 2003

2) ARB should develop land use guidelines for both state agencies and local governments. We provided lists of land use mitigation measures that could be included in that guidance. The report states that ARB supports and participates in state level efforts to improve local land use, yet defers commitments in this area to new federal planning "implemented into the next decade." We request action now to support attainment of the federal standard in Sacramento by 2005.

3) We reiterate our request that ARB include requirements for the BAAQMD control measures. These include the following requirements, which are already in place in the Sacramento area.
   a) Reduce the exemptions levels for boilers, steam generators, process heaters, space heaters, internal combustion engines and gas turbines. Require such equipment to meet both local permit requirements and emissions standards at least as stringent as those required in the Sacramento area.
   b) Establish cleanup solvent requirements for architectural coatings users; including low VOC materials and work practice standards.
   c) Reduce the VOC limit for contact adhesives.

Transport assessment

The Staff Report states that ARB will reassess some transport couples next year. California Health and Safety Code Section 39610 required this assessment every three years, beginning in 1989. An assessment of the San Francisco Bay Area to Broader Sacramento Area transport couple was last done in 1996. In April 2001, ARB performed an assessment (due in 1999), but did not evaluate the San Francisco Bay to Broader Sacramento Area transport couple as required. A new triennial assessment by ARB was due in 2002. Both ARB and District staff are working on Central California Ozone Study results and, currently, that data is not available. In the meantime, I request that the following information, which already exists, be used for transport assessments.
   a) SARMAP Modeling results performed by ARB staff for assessments of the BAAQMD Refinery Rule.
   b) Meteorological data from profilers installed following the 1996 assessment at Bruceville Road in Elk Grove, Travis AFB, and most recently in San Francisco Bay delta region
   c) Walnut Grove Tower ozone and meteorological data

Thank you for the opportunity to provide input to this regulatory process. If you have any questions regarding these comments, you may contact me at (916) 874-4803 or Brigette Tollstrup (916) 874-4832.

Sincerely,

Norm Covell
Air Pollution Control Officer

c. Brigette Tollstrup
Robert Fletcher, ARB
Bob Effa, ARB
Gayle Sweigart, ARB
Bill Norton, BAAQMD
Tom Christofk, PCAPCD
Larry Greene, YSAQMD
Marcella McTaggert, EDAPCD
Steve Speckert, FRAQMD

Attachments
Correspondence to Catherine Witherspoon, March 13, 2003

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

COPY

Norm Covell
AIR POLLUTION CONTROL OFFICER

March 13, 2003

Catherine Witherspoon
Executive Officer
California Air Resources Board
P.O. Box 2815 Sacramento, CA 95812

RE: Workshop on Ozone Transport Regulations

Dear Ms. Witherspoon;

This letter provides comments on proposed amendments to transport regulations in response to your February 25, 2003 workshop notice. The Sacramento region urgently needs every available emission reduction to meet the national ambient air quality standard for ozone by 2005 and to make expeditious progress towards attaining the state ambient air quality standards for ozone. This includes reductions from our upwind neighbors.

Our District both generates and receives transported emissions. We are concerned about these regulations not only as providing us with critical assistance in meeting Sacramento's clean air goals, but guiding the actions we must take to help neighbors downwind of Sacramento.

I support ARB defining precursors to be mitigated to include both reactive organics and nitrogen oxides. I also appreciate ARB's steps towards improving the all feasible measures' process. I have concerns that have not been addressed. These concerns are detailed below. I also request that the proposed regulations be expanded in the following areas:

State responsibility for mitigating transport
The draft regulations have not addressed our request that the state take responsibility for mitigating transported emissions.

1) ARB must look beyond stationary source controls and local district actions and mitigate transported emissions from mobile sources. Mobile source emissions dominate our ozone air quality problems, and ARB must identify new opportunities under their regulatory authority to mitigate transported emissions.

2) ARB should work with the Governor's office to secure an Executive Order requiring all state agencies include preference for using vendors who have low emission vehicles and equipment when contracting for goods and services.

777 12th Street, 3rd Floor Sacramento, CA 95814-1908
916/874-4800 916/874-4899 fax
www.airquality.org

3) ARB should work with the Governor's office to secure an Executive Order requiring construction work performed using state equipment or under state contracts meet a fleet average emission rate that is 20% below the inventory fleet average for NOx and 45% below the inventory fleet average for PM.

4) ARB should be a leader by developing land use guidelines for both state agencies and local governments. Attached are lists of land use mitigation measures that could be included in that guidance.

Improve the 'All Feasible Measures' process

The existing 'all feasible measures' process is flawed for several reasons.

1) Federal deadlines not addressed - ARB must require that upwind areas fully mitigate emissions for 'significantly' impacted areas like Sacramento to attain both state and federal ambient air quality standards. Attaining the federal standards are an important first step to attaining the state standards. It is clear that ARB must assess mitigation requirements in the context of the federal standards to ensure the sufficiency of the Bay Area's mitigation measures -- as well as those of other upwind districts -- in meeting federal attainment deadlines. ARB has asserted that federal SIP's are not the appropriate venue for assessing intrastate transport, and that addressing intrastate transport is ultimately the state's responsibility, not the federal EPA's. Although we disagree with that position, if ARB is correct, than the transport study and mitigation regulations are the only clear vehicle left for ARB to fulfill its responsibility to both assess and mitigate transport pollutant impacts. Moreover, without a genuine and thorough assessment of mitigation measures, the analysis of impacts is meaningless.

2) No additional mitigation - The requirement to impose "all feasible measures" provides no additional mitigation requirements beyond those already required by state law. California Health & Safety Code Section 40914(b) states;
   "A district may use...and the state board concurs in, either of the following:
   ...the inclusion of every feasible measure in the plan..."
   ARB staff reported that upwind districts have selected the 'all feasible' measures option and complied with the 'all feasible' measures requirement (Status Report on Transport Mitigation, July 2001.)

3) Disagreement regarding 'feasible' - You may recall that we provided comments during plan development activities in the BAAQMD requesting that additional measures be included, yet our requests for added measures were not included in the final plan. In short, we disagree that the upwind area plan met the 'all-feasible' or the related federal requirement for reasonably available control measures. We request that ARB set standards districts must meet to satisfy this requirement. For example, ARB could establish a process to identify where emissions standards and exemption levels in upwind areas must be at least equivalent to the significantly or overwhelmingly impacted downwind neighbors. If the district justifies that the less

stringent standards are not cost-effective or technologically feasible then they could seek relief.

4) Consistent planning requirements doesn't equate to consistent rules - Planning commitments are preliminary assessments of control strategies. Plans can reflect similar control strategies, yet differences in rulemaking exist. Recently, at the request of BAAQMD, our staff provided an assessment (attached) of the differences between the BAAQMD rules and the SMAQMD rules. I request that ARB evaluate this information and require rule amendments to ensure all feasible measures are in place. Additionally, I request that ARB incorporate evaluation of rule consistency from a transport perspective when exercising its oversight responsibilities during district rulemaking process.

5) Annual district reporting requirements are infeasible - Proposed addition of annual district reporting requirements (Section 70600(c)(1)) including public process for reporting on plan commitments are time consuming and do not address the fundamental issues noted above. I support ARB review of district's progress and encourage the ARB to engage a public process in that review.

The workshop notice does not discuss when ARB will reassess the transport couples. California Health and Safety Code Section 39610 required this assessment every three years, beginning in 1989. An assessment of the San Francisco Bay Area to Broader Sacramento Area transport couple was last done in 1996. In April 2001, ARB performed an assessment (that was due in 1999) but did not evaluate the San Francisco Bay to Broader Sacramento Area transport couple as required. A triennial assessment by ARB was due in 2002. Both ARB and District staff are working on Central California Ozone Study results and, currently, that data is not available. In the meantime, I request that the following information, which already exists, be used for transport assessments.

a) SARMAP Modeling results performed by ARB staff for assessments of the BAAQMD Refinery Rule.
b) Meteorological data from profilers installed following the 1996 assessment at Bruceville Road in Elk Grove, Travis AFB, and most recently in San Francisco Bay delta region
c) Walnut Grove Tower ozone and meteorological data

The above data, along with new data analysis techniques, is essential to evaluate the impact from pollutants transported on aloft winds and from transport of ozone precursors. Finally, I suggest formation of a statewide Transport working group to share ideas about transport assessment methods and to peer review the final assessments. That working group should include local air districts and members of the scientific community.

Thank you for the opportunity to provide input to this regulatory process. If you have any questions regarding these comments, you may contact me at (916) 874-4803 or Brigette Tollstrup (916) 874-4832.

Sincerely,

Norm Covell
Air Pollution Control Officer

c. Brigette Tollstrup
Robert Fletcher, ARB
Bob Effa, ARB
Gayle Sweigart, ARB

Attachments
Correspondence to William Norton, September 10, 2002
Land use mitigation measures

Blind Copies provided to the following people at the workshop (3/13/03):

Peter Hess, BAAQMD
Larry Greene, YSAQMD
Tom Christofk, PCAPCD

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

Norm Covell
AIR POLLUTION CONTROL OFFICER

September 10, 2002

Bill Norton
Interim Executive Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Norton:

This is in response to your recent request for information on the Sacramento Metropolitan Air Quality Management District's suggestions for requiring lower emitting activities in the Bay Area. Attached is a list of suggested changes to the Bay Area's Rules and Regulations. This list incorporates exemption levels and emission limitations that are already in effect in the Sacramento area and for many of the suggestions are already in effect in most of the nonattainment areas in the state.

If you have any questions about the suggested rule improvements, you can contact my staff, Aleta Kennard, at (916) 874-4833. I look forward to working with you to improve the air quality in both the Sacramento and Bay Area.

Sincerely,

Norm Covell
Air Pollution Control Officer

Attachment

L/PCG/baaqmdreq

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www.airquality.org

SUGGESTED CHANGES TO BAAQMD RULES

Suggested changes to Permit Exemptions:

Lower the permitting threshold for boilers fired on natural gas from 10 mmBTU/hr to 1 mmBTU/hr

Lower the permitting threshold for bakery ovens from 10,000 lbs product per day and 10 mmBTU/hr to 1 mmBTU/hr

Lower the permitting threshold for space heating from 20 mmBTU/hr to 1 mmBTU/hr

Lower the permitting threshold for petroleum drycleaning from 700 gal/year to 1 gal/day

Suggested changes to New Source Review regulations:

Lower offset trigger levels for NOx and VOC from 50 TPY to 15 TPY and require the offsets to be obtained at a minimum offset ratio of 1.3:1 if the offsets are not at the same site

Suggested changes to Rule 8-6 Terminals/Bulk Plants

Require the loading racks at terminals to meet an emission limit of 0.08 lbs/1000 gallons

Suggested changes to Rule 8-16 Solvent Cleaning

Were there currently is not a VOC emission limit requirement, establish an emission limit at least as stringent as:

Material Type	VOC limit, g/l
General Wipe Cleaning	50
Medical Devices/Pharm	800
Automotive Coating Remover	200
Adhesive Sealant Remover	350
General cleaning of Graphic Arts	72
Water Based Architectural Coatings	50
Solvent Based Architectural Coatings	300 or enclosed gun cleaner

Lower the VOC emission limits for the following products:

Material Type	From g/l	To g/l
Electrical/Electronic Component	250 lbs/day	500
Flexographic Printing	800	100

Remove the one unit solvent cleaning exemption and require 50 g/l material for all cold solvent degreasing.

Suggested changes to Rule 8-19 Metal Parts Coating

Lower the VOC emission limits for the following products:

Material Type	From G/l	To G/l
High Performance Architectural	750	420
Pretreatment Wash Primer	780	420
Silicone Release	700	420
Extreme Performance	550	420

Suggested changes to Rule 8-20 Graphic Arts

Lower the rule exemption level from 175 lbs/month of actual VOC emissions to 60 lbs/month actual VOC emissions. Apply this same exemption level to screen printers.

Change the fountain solution VOC limit from 8% to 80 g/l of VOC.

Suggested changes to Rule 8-24 SOCMI

Require reactors, distillation columns, crystallizers and centrifuges to meet 85% control system efficiency and 90% control efficiency

Suggested changes to Rule 8-29 Aerospace Coatings

Lower the VOC emission limits for the following products:

Material Type	From g/l	To g/l
Adhesive Bonding	750	600
Electric Discharge	800	612
Radiation Effect	800	600
Fuel Tank	720	650
High Temperature	720	420
Stripper	400	300

Suggested changes to Rule 8-51 Adhesives

Lower the VOC emission limits for the following products:

Material Type	From g/l	To g/l
Other Plastic Welding	500	450
Contact Bond Specialty	400	250

Suggested changes to Rule 9-7 Boilers

Lower exemption level from 10 mmBTU/hr when fired on natural gas to 5 mmBTU/hr

Suggested changes to Rule 9-8 IC Engines

Lower exemption level from 250 Hp to 50 Hp

Establish emission limitations for diesel fired IC engines

Suggested changes to Rule 9-9 Gas Turbines

Remove the exemption for less than 4 MW and lower the hourly exemption from 877 hours to 200 hours

Suggested strategies for the Port of Oakland

The Port Oakland has implemented a number of pilot and demonstration programs to reduce emissions from ground support equipment operating at the Port and from trucks carrying cargo to and from the Port. We suggest that the Port move well past pilot and demonstration programs and implement sweeping operational policies.

- The Port should be encouraged through any and all means to reduce idling to an absolute minimum on all heavy equipment and trucks.
- All means should be employed to reduce operating emission of both NOx and PM from ground support equipment at the Port. Strategies to reduce emissions include repowering older equipment with newer engines, encouraging turn-over to modernize the fleet, purchasing low-emission or zero-emission equipment whenever new equipment is purchased and retrofitting existing equipment to operate at lower emission levels using emulsified fuel or exhaust retrofit technology. (Note: the first diesel retrofit technology that will reduce both NOx and PM is in the CARB Verification process now and should be available by the end of the year.)
- All means should be employed to reduce operating emissions of both NOx and PM from the trucks that carry cargo to and from the Port. Strategies to reduce emissions included repowering older vehicles with newer engines, encouraging turn-over to modernize the fleet, purchasing low-emission or zero-emission vehicles whenever new vehicles are purchased and retrofitting existing vehicles to operate at lower emission levels using emulsified fuel or exhaust retrofit technology.
- All ships in port should be encouraged to use shore power from the grid rather than on-board generators while docked.

Suggested strategies for the Marine Vessels

US EPA is currently working with international agencies to develop more stringent regulations for marine vessels. However, several associations representing local and state air pollution officers in California and the United States have petitioned EPA to make the proposed regulations much tougher. These associations include the California Air Pollution Control Officers Association (CAPCOA), the State and Territorial Air Pollution Prevention Association (STAPPA) and the Association of Local Air Pollution Control Officers (ALAPCO). The BAAQMD should go on record in support of these tougher standards which include:

- Establish and implement Tier 2 NOx standards that achieve emission reductions comparable to those being required of other mobile source categories.
- Require that all emission standards apply to both domestic and foreign flagged vessels.
- Establish maximum fuel sulfur content levels of no more than 15,000ppm, preferably much lower in the 500 to 5,000ppm range.

- Include measures to address hydrocarbon, carbon monoxide and particulate matter emissions.
- Evaluate retrofit strategies for potential reductions in emissions from existing vessels.

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	Bicycle/Pedestrian/Transit			
1	Non-residential projects provide bicycle lockers and/or racks	C	0.5	
2	Provide an additional 20 percent of required Class I and Class II bicycle parking facilities	C	0.5	
3	Non-residential projects provide personal showers and lockers	C	0.5	
4	Bicycle storage (Class I) at apartment complexes or condos without garages	R	0.5	
5	Entire project is located within 1/2 mile of an existing Class I or Class II bike lane and provides a comparable bikeway connection to that existing facility	R, C, M	1.0	All facilities must be in place before 20% of the occupancy permits are granted or before 2005, whichever occurs first.
6	The project provides for pedestrian facilities and improvements such as overpasses and wider sidewalks	R, C, M	1.0	All facilities must be in place before 20% of the occupancy permits are granted or before 2005, whichever occurs first.
7	Bus service provides headways of 15 minutes or less for stops within 1/4 mile; project provides essential bus stop improvements (i.e., shelters, route information, benches, and lighting).	C	1.0	Maximum combined credit for measure #7 and #64 is 2.0
8	Provide a display case or kiosk displaying transportation information in a prominent area accessible to employees or residents	R, C, M	0.5	
9	High density residential, mixed, or retail/commercial uses within 1/4 mile of existing transit, linking with activity centers and other planned infrastructure	R, C, M	2.0 for light rail, 1.0 for bus only	Planned infrastructure must be in General Plan or Community Plan. Office uses considered under "Commercial Building Design" category. Maximum credit is 2.0 (light rail and bus points cannot be combined).
10	High density residential, mixed, or retail/commercial uses within 1/4 mile of planned transit, linking with activity centers and other planned infrastructure	R, C, M	1.0 for light rail, 0.5 for bus only	Planned transit must be in MTP or RT Masterplan; planned infrastructure must be in General Plan or Community Plan. Office uses considered under "Commercial Building Design" category. Maximum credit is 1.0 (light rail and bus points cannot be combined). Cannot get points for both this measure and measure #9.

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	Parking			
11	Employee and/or customer paid parking system (no validations)	C	3.0	Must be coordinated with TMA.
12	Provide minimum amount of parking required	C, M	0.5	
13	Provide parking reduction: Office 25%, Medical office 8%, Commercial 5%, Industrial 10%,, Additional 10-20% if located along transit station (special review of parking is required)	C, M	2.5	
14	Provide grass paving or reflective surface for unshaded parking lot areas, driveways, or fire lanes that reduce standard paving by 10% or more	R, C, M	0.5	
15	Increase parking lot shading by 20% over code	R, C, M	1.0	
16	Provide electric vehicle charging facilities	R, C, M	1.0	Details of facilities' provision must be coordinated with City or County of Sacramento and SMAQMD.
17	Provide preferential parking for carpool/vanpools	C	0.5	
18	Covered carpool/vanpool spaces near the entrance to the building(s)	C	0.5	
19	Loading and unloading facilities for transit and carpool/vanpool users	C	0.5	
20	Project is located within one mile of a park and ride lot operated by a transportation agency	R	0.5	
21	Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances	C	0.5	

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res. C=Comm M=Mixed	Point Value	Comments
	Commercial Building Design			
22	Office FAR is 0.75 or greater within 1/4 mile of a planned transit stop	C, M	**1.5 for light rail, 0.8 for bus only**	Planned transit must be in MTP or RT Masterplan. Cannot get points for both this measure and the below measure.
23	Office FAR is 0.75 or greater within 1/4 mile of an existing transit stop	C, M	**2.5 for light rail, 1.5 for bus only**	
24	Setback distance is minimized between development and existing transit, bicycle, or pedestrian corridor	C, M	**1.0**	
25	Setback distance is minimized between development and planned transit, bicycle, or pedestrian corridor	C, M	**0.5**	Planned transit, bicycle or pedestrian corridor must be in MTP, RT Masterplan, General Plan, or Community Plan. Cannot get points for both this measure and the above measure.
	Residential Development			
26	Average residential density 7 d.u. per acre or greater	R	**1.5, 3.0, 4.5**	1.5 points for 7-14 du/acre, 3.0 points for 15-29 du/acre, 4.5 points for 30+ du/acre
27	Multiple and direct street routing (grid style)	R, C, M	**2.5**	Full credit for internal connectivity factor (CF) >= 0.70, and average 1/4 mile or less between external connections. [CF= # of intersections / (# of cul-de-sacs + intersections)]
28	Granny Flats - Have ancillary "granny units" (requires Special Development Permit but no Accessory Structure Use Permit)	R	**1.0**	

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	Mixed Use			
29	Development of projects predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site. A "single site" may include contiguous properites.	M	3.0	Cannot get points for both this measure and any "Convenience Services" measures. Also mutually exclusive with #30.
30	Mixed use - Have at least 3 of the following on site and/or within 1/4 mile: Residential Development, Retail Development, Personal Services, Open Space, Office	R, C, M	1.0	Cannot get points for both this measure and any "Convenience Services" measures. Also mutually exclusive with #29.
31	Neighborhood serving as focal point with parks, school and civic uses within 1/4 mile	R, M	0.5	
32	Separate, safe, and convenient bicycle and pedestrian paths connecting residential, commercial, and office uses	R, C, M	2.0	
33	The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede-bicycle or pedestrian circulation	C, M	1.0	
	Convenience Services			
34	Day care facilities are provided on site	R, C, M	1.0	
35	Restaurant or cafeteria on site or within 1/4 mile of site	R, C, M	0.2	
36	Bank or ATM on site or within 1/4 mile of site	R, C, M	0.2	
37	Dry cleaners on site or within 1/4 mile of site	R, C, M	0.2	
38	Post office on site or within 1/4 mile of site	R, C, M	0.2	
39	Entertainment (movie/video) on site or within 1/4 mile of site	R, C, M	0.2	
40	Recreation facility/fitness center on site or within 1/4 mile of site	R, C, M	0.2	

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	Building Component Measures			
41	Install lowest emitting commercially available fireplace	R	1.0	
42	Install lowest emitting commercially available furnace	R, C, M	0.5	
43	Install ozone destruction catalyst on air conditioning systems, in consultation with SMAQMD	R, C, M	2.5	
44	Install Energy Star labeled roof materials	C	0.5	
45	Provide fiber optic wiring and connections	R, C, M	0.5	
46	Provide T1 wiring and connections	R, C, M	0.5	
47	Install roof photovoltaic energy systems	R	0.5	2.5 if offered as a standard feature on all homes
48	Comply with SMUD Advantage (Tier II) energy standards	R	0.5	
49	Comply with SMUD Advantage Plus (Tier III) or EPA/DOE Energy Star Home energy standards	R	1.0	Cannot get points for both this measure and the above measure.
50	Orient 75 or more percent of homes and/or buildings to face either north or south (within 30 degrees of N/S), and include shading masterplan	R	0.5	Moved from Commercial Building Design and Residential Development sections.

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	TDM and Misc. Measures			
51	Include permanent TMA membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other non-revocable funding mechanism.	R, C, M	2.5	
52	Carpool Matching Assistance	C	0.2	Must be coordinated with TMA.
53	Provide financial incentives to carpoolers for vehicle tune-up or maintenance	R, C, M	0.2	Must be coordinated with TMA.
54	Provide Flextime for non-SOV commuters	C	0.2	Must be coordinated with TMA.
55	Provide Guaranteed Ride Home	C	0.2	Must be coordinated with TMA.
56	Implement compressed work week schedules	C	0.2	Must be coordinated with TMA.
57	Provide on-site Transportation Coordinator	R, C, M	0.2	Must be coordinated with TMA.
58	Contract only with commercial landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use.	C	2.0	
59	Make physical development consistent with requirements for neighborhood electric vehicles	R	1.5	
60	Install videoconferencing system	C, M	0.5	
61	Promote-teleworking and implement an employee-telework policy	C, M	1.0	
62	Provide free-access telework terminals in multi-family projects	R	1.0	At least one terminal per 100 apartments
63	Implement Clean Air Business Practices such as using low-emission delivery vehicles, contract with alternative-fuel waste hauling companies, etc., in consultation with-SMAQMD	C	tbd	
64	Provide electric shuttle to transit stops	R, C, M	2.0	Maximum combined credit for measure #7 and #64 is 2.0
65	Provide-a complimentary cordless electric lawnmower to each residential buyer	R	2.0	
66	Provide an opportunity to receive either a complimentary bicycle or electric bicycle retrofit kit to each residential buyer	R	0.5	
67	Transit pass subsidy and/or commute alternative allowance	C	1.5	Point value based on 100% subsidy.

Recommended SMAQMD Guidance for Land Use Emission Reductions

#	Description	Development Type R=Res C=Comm M=Mixed	Point Value	Comments
	Innovative Strategies			
99	Other proposed strategies, in consultation with City or County of Sacramento and SMAQMD	R, C, M	tbd	

STAFF'S PROPOSED CHANGES TO PROPOSED REGULATION ORDER

OZONE TRANSPORT MITIGATION REGULATIONS

MAY 22, 2003

The ARB staff is proposing the following changes to the proposed amendments to the transport mitigation regulations that were included in the Staff Report (ISOR). The ~~strikeout~~ indicates deletions, and the underline indicates additions.

70600. Emission Control Requirements

(a) Definitions

Section (a)(1) is amended to read:

(1) "~~A~~all ~~F~~feasible ~~M~~measures" means air pollution control measures, including but not limited to emissions standards and limitations, applicable to all air pollution sources categories under a district's authority that are based on ~~achieve~~ the maximum ~~possible~~ degree of reductions ~~of~~ achievable for emissions of ozone precursors, taking into account technological, social, environmental, energy and economic~~, and energy~~ factors, including cost-effectiveness.

The substitution of sources for source categories is intended to clarify the intent of ARB staff. In the Staff Report, the ARB staff stated its intent that the terminology "all air pollution sources under a district's authority" be interpreted as placing emphasis on a district's evaluation of source categories, not every source within a particular category.

Also, minor changes have been made to the definition to clarify that cost-effectiveness is part of the economic factors that upwind districts would consider when implementing the "all feasible measures" requirement.. Cost-effectiveness of potential measures is considered by air districts, as part of their ongoing implementation of the California Clean Air Act, and is required by section 40926 of the California Health and Safety Code.

Section (a)(2) is amended to reflect non-substantive edits and reads:

(2) "~~O~~ozone precursors" means oxides of nitrogen and reactive organic gases.

(b) Specific Requirements

Section (b) is amended to read:

(b) Specific Requirements

Districts within the areas of origin of transported air pollutants, as identified in section 70500(c), shall include sufficient emission control measures in their attainment plans for ozone adopted pursuant to part 3, ~~C~~chapter 10 (commencing with section 40910) of division 26 of the Health and Safety Code, ~~Part 3, Division 26, beginning with section 40910~~, to mitigate the impact of pollution sources within their jurisdictions on ozone concentrations in downwind areas commensurate with the level of contribution. An upwind district shall comply with the transport mitigation planning and implementation requirements set forth in this section regardless of their attainment status, unless the upwind district complies with the requirements of section 70601. At a minimum, the attainment/transport mitigation plans for districts within the air basins or areas specified below shall conform to the following requirements:

The term "commensurate with level of contribution" was added for consistency with State law. Section 39610 of the Health and Safety Code directs the ARB to establish mitigation requirements commensurate with the degree of contribution from the upwind district.

Language was added to clarify the intent of the original proposal that upwind districts are subject to the mitigation requirements regardless of their attainment status. State law specifically requires upwind districts to plan for attainment in both their own district and that of the downwind districts, and to also at a minimum, include in their attainment plan all of the mitigation measures required by ARB. The new language "attainment/mitigation plans" clarifies that upwind districts, regardless of attainment status, are responsible for compliance with transport mitigation requirements in their triennial update to attainment plans. That is attainment plans must include a transport mitigation element.

No changes were made to (b)(1), (b)(2), (b)(3), (b)(4), and (b)(5).

(c) Implementation

The following implementation process has been deleted, as this process is no longer used in the modified regulation:

~~(1) By November 1 of each year, each district subject to the requirements set forth in section 70600(b), shall, in consultation with the downwind districts, review the list of control measures identified in its most recently approved attainment plan and make an initial finding as to whether the list of control measures meets the requirements of section 70600(b). Once the district has made the initial finding, the district shall:~~

~~(A) issue a public notice describing the basis of the initial finding and provide for public comment on the initial finding for a period of at least 30 days;~~

~~(B) review the public comments and make a final finding;~~

~~(C) by December 31 of each year, submit, concurrent with the submittal of a progress report to the state board required under Health and Safety Code section 40924(a), a final finding as to whether the list of control measures continues to include the measures required by section 70600(b) and, if not, a listing of measures that will be added;~~

~~(2) Within 60 days of submittal, the state board shall review the final finding and public comments and notify the district if additional measures must be added to the list of control measures.~~

~~(3) Within 180 days of receiving notification by the state board, the district shall, as appropriate, update the rulemaking calendar required pursuant to Health and Safety Code section 40923.~~

The following implementation process has been added to reflect new language in the modified regulation:

(1) Prior to revising its attainment/transport mitigation plan pursuant to section 40925 of the Health and Safety Code, each district subject to the requirements set forth in section 70600(b) shall, in consultation with the downwind districts, review the list of control measures in its most recently approved attainment plan and make a finding as to whether the list of control measures meets the requirements of section 70600(b). The district shall include the finding in its proposed triennial plan revision.

(2) If the ARB determines that a district's plan does not satisfy the requirements of section 40912 of the Health and Safety Code and this regulation, the Board and the district shall follow the procedures specified in section 41503.2 of the Health and Safety Code for addressing plan deficiencies.

This language replaces requirements for annual review of all feasible measures, and adds new language that aligns implementation with the triennial plan review process. This change was made in response to comments that an annual review would require excessive district resources and that formalizing review from a transport perspective every three years would achieve comparable results.

Note: Authority cited: Sections 39600, 39601 and 39610(b), Health and Safety Code. References: Sections 39610, 40912, 40913, 40921, 40924, 40925, and 41503, Health and Safety Code.

70601. Procedure for Limiting the Application of All Feasible Measures and Best Available Retrofit Control Technology.

No changes to (a), (b), and (d)

Section (c) is amended to read:

(c) the district is implementing an alternative emissions reduction strategy pursuant to section 40914 of the Health and Safety Code and demonstrates, based on the best available scientific evidence, including but not limited to air quality modeling analyses, that the strategy will be at least as effective and as expeditious as the transport mitigation requirements specified in section 70600; or

Previous language implied that the use of the best available scientific evidence including air quality modeling analyses was allowed. This language clarifies this intent.

Note: Authority cited: Sections 39600, 39601, 39610(b), Health and Safety Code. References cited: Sections 39610, 40912, 40913, 40921, 40924, 40925, and 41503, Health and Safety Code.

All Measures: State-Fed & Bay Area - List for F

Control Measure	Strategy Title	Description	VOC Potential Emission Reductions tpd	NOx Potential Emission Reductions tpd	Imple-mentation Date	Implementing Agency
B-1	Petroleum Refineries	Require controls on wastewater treatment equivalent to the South Coast AQMD on process drains, manhole covers, sewer lines, and recovered oil storage vessels.			2007	BAAQMD
B-1	Petroleum Refineries	Require controls on flare emissions equivalent to the San Joaquin and Santa Barbara air districts	n/a		2007	BAAQMD
B-1	Petroleum Refineries	Require controls on fugitive emissions that incorporate the more stringent requirements currently being implemented in the South Coast and Santa Barbara air districts.			2007	BAAQMD
B-1	Petroleum Refineries	Require controls on storage tanks including "No visible gap" criteria for external floating roof, external floating roof tanks with domed roofs, and fixed roof tanks must be vented to 95% efficient control device and all fittings vapor tight.			2007	BAAQMD
B-1	Petroleum Refineries	Reduce the Nox emission limit for boilers and process heaters used at refineries and lower the applicability limit for gaseous fuels to 5 mmbtu/hr.		1.27	2007	BAAQMD
D1	Semiconductor Manufacturing	Require the use of advanced low VOC solvents and photoresist solutions and/or the use of an emission control device that will capture and abate 95% of the uncontrolled emissions.			2007	BAAQMD
D12	Graphic Arts	Lower VOC limits for adhesives, fountain solutions and cleaning operations.			2005	BAAQMD
D14	Other Gas Turbines	Require a lower Nox emission limit for gas turbines which is comparable to SCAQMD and SJUAPCD.		0.69	2010	BAAQMD
D16	Boilers, Steam Generators, Process/Space Heaters	Require boilers 5-20 mmbtu/hr to meet 15 ppm of NOx and boilers greater than 20 mmbtu/hr to meet 9 ppm of NOx.		0.66	2007	BAAQMD
D19	Electric Utilities	Require lower Nox limit for boilers, turbines, and engines used at electric utilities.		2.27	2010	BAAQMD
D27	Fuel Handling	Option 1 - Implement an incentive program to accelerate replacement of gasoline cans.			2005	BAAQMD
D27	Fuel Handling	Option 2 - Require participants in the lawnmower exchange program to surrender old gas cans.			2005	BAAQMD
D27	Fuel Handling	Option 3 - Provide free replacement gas cans to commercial businesses.			2005	BAAQMD
D3	Adhesives and Sealants	Lower VOC limits for solvent based adhesives and sealants.			2007	BAAQMD
D7	Degreasing/Solvent Cleaning	Reduce VOC limit for cleaning materials to 25 g/l to match South Coast limit.			2007	BAAQMD
D8	Thinning, Surface Prep and Cleanup	Amend surface prep and cleanup rules in Placer and Yolo-Solano to capture all unregulated cleaning operations. Adopt solvent cleaning rules in Feather River and El Dorado similar to Sacramento Rule 466.			2005	BAAQMD
D9	Unspecified	Lower VOC limits for coatings not otherwise captured by a specific coating rule.	n/a		2005	BAAQMD
LU-2A	Indirect Source Rule for New Land Use/Transportation Development	Implement an Indirect Source Rule to mitigate the **construction** impacts of new projects where emissions exceed established District Thresholds of Significance.		4.65	2005	BAAQMD
LU-2B	Indirect Source Rule for New Land Use/Transportation Development	Implement an Indirect Source Rule to mitigate the **operational** impacts of new projects where emissions exceed established District Thresholds of Significance.		8.45	2005	BAAQMD
OFMS-14/ OFMS7	Agricultural Engines	Incentive to replace diesel agricultural engines with electric at normal rebuild times.		0.02	2005	BAAQMD
OFMS-14/ SN-48	Agricultural Engines	Incentive to implement a mandatory program for early replacement of diesel ag engines.		0.32	2005	BAAQMD

All Measures: State-Fed & Bay Area - List for February 18, 2004

OFMS37	Replace standard gasoline powered mowers with electric ones	Implement an incentive program to replace gasoline-powered mowers with electric mowers.		0.001	2005	BAAQMD
OFMS73	Establish clean air labeling, energy conservation and public education programs	Public education/outreach measure consisting of clean air vehicle labeling and energy conservation.		0.1632	2005	BAAQMD
OFMS-77	Ground Support Equipment	Reduce GSE and ground access vehicles with fleet turnover and replacement with ZEVs, repower, retrofit, and replacement with equipment that meet lower emission standards.		0.311	2005	BAAQMD
ONMS-375/ ONMS-86	Fleet Rule	Require light-duty, medium-duty, and heavy-duty public fleets and those private entities contracted by a public agency to meet a combination of fleet average emissions reduction and purchasing requirements that would lead to lower emissions.		4.6	2007	BAAQMD
ONMS-52 (a. & b)	Heavy-duty Diesel Vehicle Retrofits	Sacramento Emergency Clean Air Transportation (SECAT) and Carl Moyer programs in that it provides incentives aimed at reducing oxides of nitrogen (NOx) emissions.		1.798	2007	BAAQMD
ONMS-52/ ONMS-374; ONMS-52/ ONMS-65; ONMS-52/ ONMS-255; ONMS-52/ MISC-31	Heavy-Duty Diesel Engine Repowers; Commercial vehicle fleet modernization; Dual Fuel Retrofit Technology; Emulsified Diesel/GTL	Sacramento Emergency Clean Air Transportation (SECAT) and Carl Moyer programs in that it provides incentives aimed at reducing oxides of nitrogen (NOx) emissions.		2.311	2005	BAAQMD
ONMS-61/ONMS-62	Clean Private Fleet Requirements	Require light-duty, medium-duty, and heavy-duty private fleets to meet a combination of fleet average emissions reduction and purchasing requirements leading to lower NOx and other pollutant emissions.		6.3	2007	BAAQMD
ONMS-69	Free Gas Caps	Provide free gas caps to light duty passenger and truck owners during smog check.			2005	BAAQMD
SN-111A	Large Water Heaters and Small Boilers	Establish low NOx limits for all new boilers and water heaters between 75,000 and 1,000,000 Btu/hr.		0.171	2007	BAAQMD
SN-58/SN-57	Oil and Gas Fugitive Emissions	Reduce the leak threshold, increase the inspection frequency, and reduce the repair time for leaking fugitive components.			2005	BAAQMD
SN-59	Asphaltic Concrete Production	Establish NOx limits for combustion units consistent with low NOx burners and FGR. Require capture and control of fugitive ROG emissions.		0.017	2007	BAAQMD
TCM-159	Expand "Spare The Air" Program	Limit activity on Spare the Air days or days when an ozone exceedance has been forecast.		2.68	2005	BAAQMD
TCM-159/ OFMS13	Voluntary Program to reduce pleasure craft use	Limit activity on Spare the Air days or days when an ozone exceedance has been forecast.		0.111	2005	BAAQMD
LU-4	BAY AREA Community Design Program	Address a wide range of concerns regarding current development patterns that are dominated by "urban sprawl". Level 2. Local Land Use Change plus Regional Accessibility		0.12	2007	BAAQMD/ County, City, Municipal bodies/ Transit agencies/ Regional Transportation Planning Agency / MPO
OFMS-52	Construction equipment Idling	Limit idling on construction equipment.		0.42	2005	BAAQMD/ City/ County/ CARB
ONMS 64	Catalytic converter replacement program	Voluntary (incentivized) replacement of catalysts and oxygen sensors on older passenger cars and light trucks.		2.338	2007	BAAQMD/Dept of Consumer Affairs
TCM-174	Work-Related Trip Reduction Program	Enhance the existing Regional Ridesharing Program that is currently part of the RTP Track 1 program.		0.333	2005	BAAQMD/TMAs

All Measures: State-Fed & Bay Area - List for February 18, 2004

CONS 1	Set new product limits for 2006	Limit VOC content of products and/or stipulate less reactive VOCs for graffiti removers, multipurpose solvents, electronic cleaners, adhesive removers, toilet/urinal care products, nail polish hairstyling aids, other cleaning products, special purpose adhesives, and footwear care products.			2007	CARB
FVR 1	Increase recovery of fuel vapors from aboveground storage tanks	Adopt enhanced vapor recovery requirements for aboveground storage tanks.			2007	CARB
FVR 2	Recover fuel vapors from gasoline dispensing at marinas	Adopt Phase II Vapor Recovery requirements for marinas.			2007	CARB
FVR 3	Reduce fuel permeation through gasoline dispenser hoses	Require gasoline dispenser hoses to meet the gasoline permeation rate requirements of SAE Standard J1527.			2007	CARB
LT/MED-DUTY 1	Replace or upgrade emission control systems on existing passenger vehicles-Pilot Program	Require mandatory replacement of catalysts, oxygen sensors and evaporative emission canisters on older passenger cars and light trucks.		23.375	2007	CARB
LT/MED-DUTY 2	Improve Smog Check to reduce emission from existing passenger & cargo vehicles	Increase the repair cost ceiling and annual, or at least biennial, adjustments from now on.		1.86	2005	CARB
MARINE 1	Pursue approaches to clean-up the existing harbor craft fleet-cleaner fuels and engines	Reduce emissions of NOx and HC from existing vessels through options including retrofit controls, repowering, and the use of cleaner fuels.		0.8476	2007	CARB
MARINE 2	Pursue approaches to reduce land-based port emissions-alternative fuels, cleaner engines, retrofit controls, electrification, education programs, operational controls	Reduce emissions of ROG, NOx and PM10 from land based port related combustion sources through using cleaner engines, alternative fuels, retrofit controls, electrification, education programs and operational controls.		0.034	2005	CARB
OFF-RD CI 1/OFF-RD CI 2	Clean up the existing heavy-duty off-road equipment fleet (compression ignition engines)-Retrofit Controls	Require emission reduction retrofit and aftertreatment devices to be installed on off-road heavy-duty (> 50 Hp) Diesel (HDD) equipment through an incentive program or in-use emission control rule. Require HDD off-road vehicles and equipment to be registered and inspected to detect improper maintenance/tampering.		3.081	2007	CARB
OFF-RD LSI 1/ OFMS56	Set lower emission standards for new off-road gas engines (Spark ignited engines 25 hp and greater)	Align California standards with the more stringent Tier 2 emission standards promulgated by EPA for these engines.		0.063	2007	CARB
OFF-RD LSI 2	Pursue approaches to clean up the existing off-road gas equipment fleet (spark-ignition engines 25 hp and greater)-Retrofit Controls	Require retrofit controls/more stringent emission standards from large spark-ignition (LSI) engines over 25 horsepower used in off-road equipment.		0.627	2007	CARB
OFMS 75	Tighter emission standards for pleasure craft / State/Federal	Set new standards for marine craft similar in stringency to EPA's standards for HC+NOx but roll in more quickly.			2005	CARB
ONMS 345	Halt Rolling Exemption in Smog Check Program	Halt the 30-year rolling exemption and include pre-1974 vehicles in the Smog Check Program		0.433	2005	CARB

All Measures: State-Fed & Bay Area - List for February 18, 2004

ON-RD HVY DUTY 1	Augment truck and Bus Inspections with Community-based Inspections	Augment existing Heavy-Duty Inspection Program at weigh stations with inspections of heavy-duty vehicles for evidence of improper maintenance/tampering using a "snap idle" test in "mixed-use communities" (residential/commercial/industrial areas).			2005	CARB
ON-RD HVY DUTY 2	Capture and control vapors from gasoline cargo tankers	Require the vapor connections on fuel cargo tankers to be fitted with closure devices such as poppeted adapters/manually operated valves, and product/vapor recovery hoses to have poppeted caps/adapters.			2007	CARB
ON-RD HVY DUTY 3/ ONMS-45/ ONMS-42	Heavy-duty Diesel Vehicle Idling Restriction; Reflash & CARB Commitments	Restrict idling; implement idling reduction devices (GVWR > 14,000 lbs); Heavy-duty Engine Recalibration (reflash); ARB SIP Committed reductions		9.738	2005	CARB
SMALL OFF-RD 1	Set lower emissions standards for new handheld lawn and garden equipment (SI engines under 25 hp)	Establish new exhaust emission standards and evaporative emission standards for 2-stroke handheld engines.		0.06	2010	CARB
TCM-159/ OFMS13	Ban 2 -Strokes Pleasure craft	Limit activity on Spare the Air days or days when an ozone exceedance has been forecast.		1.252	2005	CARB
ONMS-60	Increase to 100% Testing Only	Additional option is to include inspection of evaporative emissions as well and require repairs for emission above a certain threshold.			2005	Department of Consumer Affairs, Bureau of Automotive Repair with cooperation of the Department of Motor Vehicles.
			Total	47.3142	73.3948	

State-Fed Measures (Bay Area) - List for February 18, 2004

Control Measure	Strategy Title	Description	VOC Potential Emission Reductions (tons/day)	NOx Potential Emission Reductions (tons/day)	Implementation Date	Implementing Agency
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OFF-RD LSI 2	Pursue approaches to clean up the existing off-road gas equipment fleet (spark-ignition engines 25 hp and greater)-Retrofit Controls	Require retrofit controls/more stringent emission standards from large spark-ignition (LSI) engines over 25 horsepower used in off-road equipment.		0.627	2007	CARB
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ONMS-60	Increase to 100% Testing Only	Additional option is to include inspection of evaporative emissions as well and require repairs for emission above a certain threshold.			2005	Department of Consumer Affairs, Bureau of Automotive Repair with cooperation of the Department of Motor Vehicles.
		Total	29.7934	41.3706		

BAAQMD Measures - List for February 18, 2004

Control Measure	Strategy Title	Description	VOC Potential Emission Reductions (tons/day)	NOx Potential Emission Reductions (tons/day)	Imple-mentation Date	Implementing Agency
B-1	Petroleum Refineries	Require controls on wastewater treatment equivalent to the South Coast AQMD on process drains, manhole covers, sewer lines, and recovered oil storage vessels.			2007	BAAQMD
B-1	Petroleum Refineries	Require controls on flare emissions equivalent to the San Joaquin and Santa Barbara air districts	n/a		2007	BAAQMD
B-1	Petroleum Refineries	Require controls on fugitive emissions that incorporate the more stringent requirements currently being implemented in the South Coast and Santa Barbara air districts.			2007	BAAQMD
B-1	Petroleum Refineries	Require controls on storage tanks including "No visible gap" criteria for external floating roof, external floating roof tanks with domed roofs, and fixed roof tanks must be vented to 95% efficient control device and all fittings vapor tight.			2007	BAAQMD
B-1	Petroleum Refineries	Reduce the Nox emission limit for boilers and process heaters used at refineries and lower the applicability limit for gaseous fuels to 5 mmbtu/hr.		1.27	2007	BAAQMD
D1	Semiconductor Manufacturing	Require the use of advanced low VOC solvents and photoresist solutions and/or the use of an emission control device that will capture and abate 95% of the uncontrolled emissions.			2007	BAAQMD
D12	Graphic Arts	Lower VOC limits for adhesives, fountain solutions and cleaning operations.			2005	BAAQMD
D14	Other Gas Turbines	Require a lower Nox emission limit for gas turbines which is comparable to SCAQMD and SJUAPCD.		0.69	2010	BAAQMD
D16	Boilers, Steam Generators, Process/Space Heaters	Require boilers 5-20 mmbtu/hr to meet 15 ppm of NOx and boilers greater than 20 mmbtu/hr to meet 9 ppm of NOx.		0.68	2007	BAAQMD
D19	Electric Utilities	Require lower Nox limit for boilers, turbines, and engines used at electric utilities.		2.27	2010	BAAQMD
D27	Fuel Handling	Option 1 - Implement an incentive program to accelerate replacement of gasoline cans.			2005	BAAQMD
D27	Fuel Handling	Option 2 - Require participants in the lawnmower exchange program to surrender old gas cans.			2005	BAAQMD
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BAAQMD Measures - List for February 18, 2004

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Summary of Control Strategies for San Francisco Bay Area Federal Nonattainment Area

Presented to BAAQMD & SMAQMD Meeting, February 18, 2004

Raymond K. Schubert
Michael D. Jackson
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TIAX LLC
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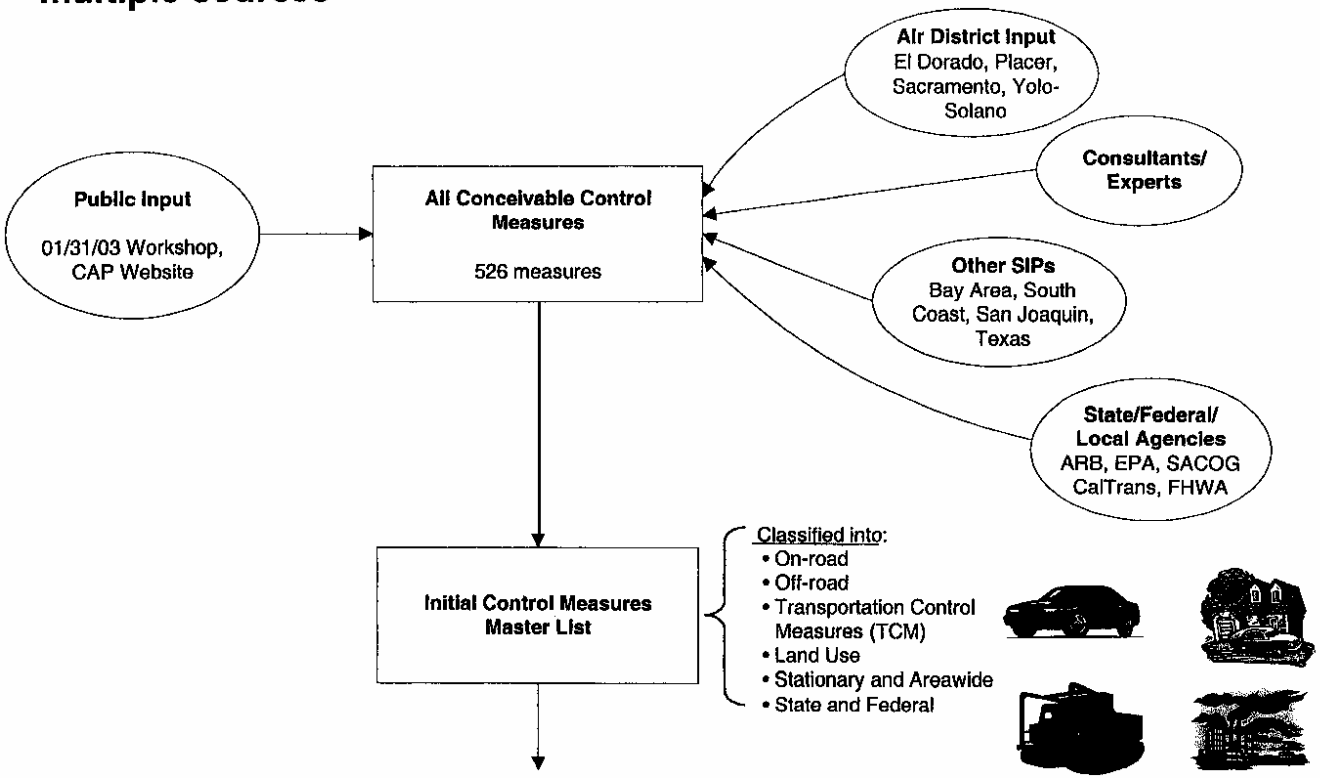
Reference: D0200

1. Bay Area Methodology
2. Overview of Analysis
3. Effectiveness of Control Measures
4. Summary

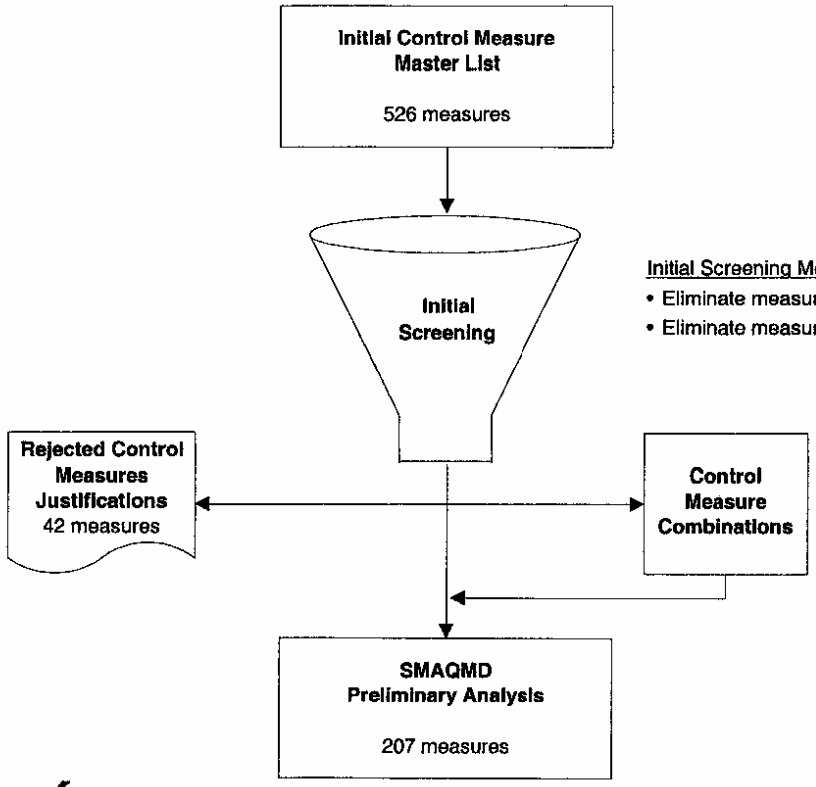
Agenda

1. Bay Area Methodology
2. Overview of Analysis
3. Effectiveness of Control Measures
4. Summary

The initial control measure master list is a compilation of measures from multiple sources



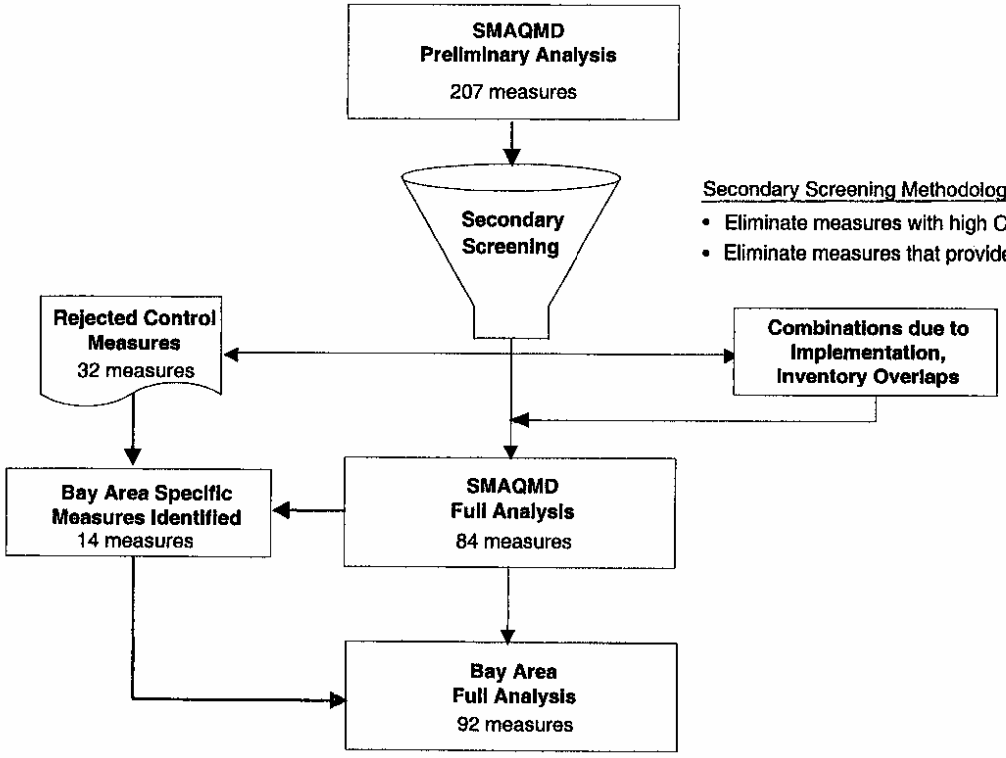
The initial control measure list was reduced by performing a screening and combining similar and complementary measures



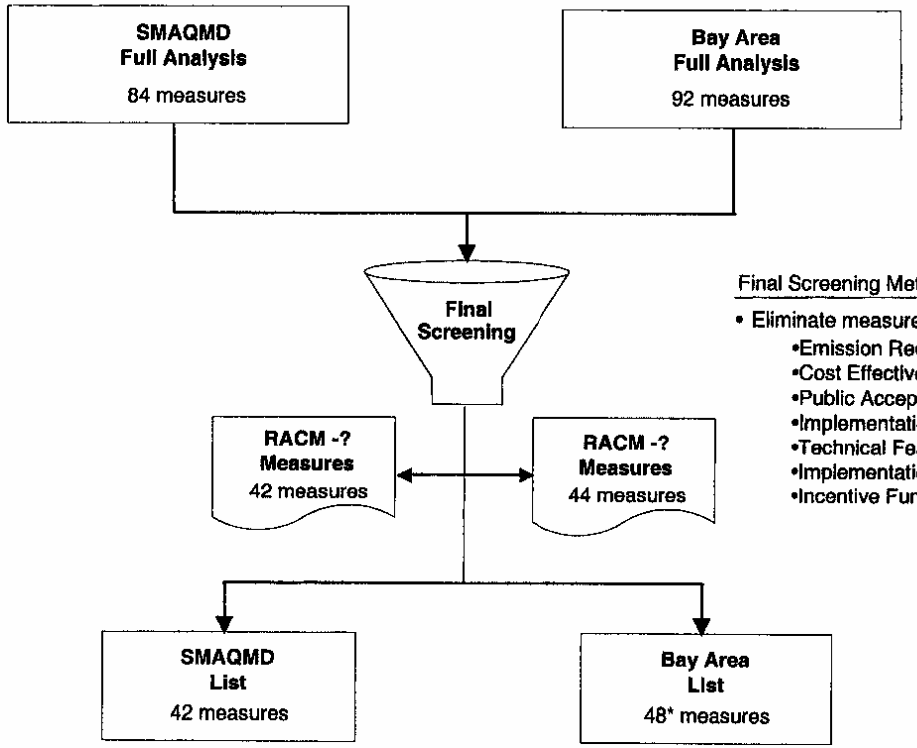
Initial Screening Methodology :

- Eliminate measures that are not technically feasible
- Eliminate measures that do not provide emission benefits

The Sacramento preliminary analyses were evaluated to identify measures for full analysis, for both Sacramento and the Bay Area.



Finally, the full analysis measures were screened based on a Feasibility Analysis to identify potentially viable measures.



Final Screening Methodology :

- Eliminate measures based on Feasibility Analysis
  - •Emission Reductions
  - •Cost Effectiveness
  - •Public Acceptability
  - •Implementation/Enforcement
  - •Technical Feasibility
  - •Implementation in 2008 Timeframe
  - •Incentive Funding Availability

BA had to made that determination

* - Some incentive measures are not funded

Sacramento control measure master list used to identify measures for Bay Area analysis

- 207 Sacramento preliminary control measure analysis were performed
  - these measures were available to the BAAQMD on the web
- Secondary screening identified measures for full analysis
  - 84 measures in Sacramento
  - 92 measures in the Bay Area
- The analysis effort was divided into three levels of analyses:
  - Bay area specific -- different analysis because of implementation/inventory
  - "translation" of control measure from SFNA inventory to Bay Area inventory
  - State/Federal measures were completed to identify emission reductions based on proposed ARB measures

Sacramento control measure master list used to identify measures for Bay Area analysis

- TIAX, Sierra Research, and Jones & Stokes teamed on this effort and divided the work:

Analysis Type	Onroad / TCM / Land Use	Offroad	Stationary / Area Wide	Total Measures
Translation	21	11	28	60
Bay Area Specifc	4	2	8	14
State/Fed.	5	10	3	18
Total	30	23	39	92

Sierra Research

- Some measures were identified as having state jurisdiction during the analysis and are classified as such, e.g. Tighter emission standards for pleasure craft (OFMS75).
- Final control measure list was developed based on RACM feasibility in the 2008 timeframe.

Agenda

1. Bay Area Methodology
2. Overview of Analysis
3. Effectiveness of Control Measures
4. Summary

All analysis have the same elements

- Described control measure
- Identified inventory EIC categories
  - Used Planning Inventory
  - Selected 2005 or 2007, based on implementation date, and 2010
  - Used full Emission Inventory Codes
- Estimated emission reductions for control measure
  - Tons per day and percent effectiveness by each individual emission inventory code
  - Calculated cumulative effects for 2010
- Determined implementation timeframe and estimated cost effectiveness
  - 2005 or 2007 and 2010
- Evaluated control measures on U.S. EPA Criteria
  - Real, quantifiable, permanent, enforceable, surplus

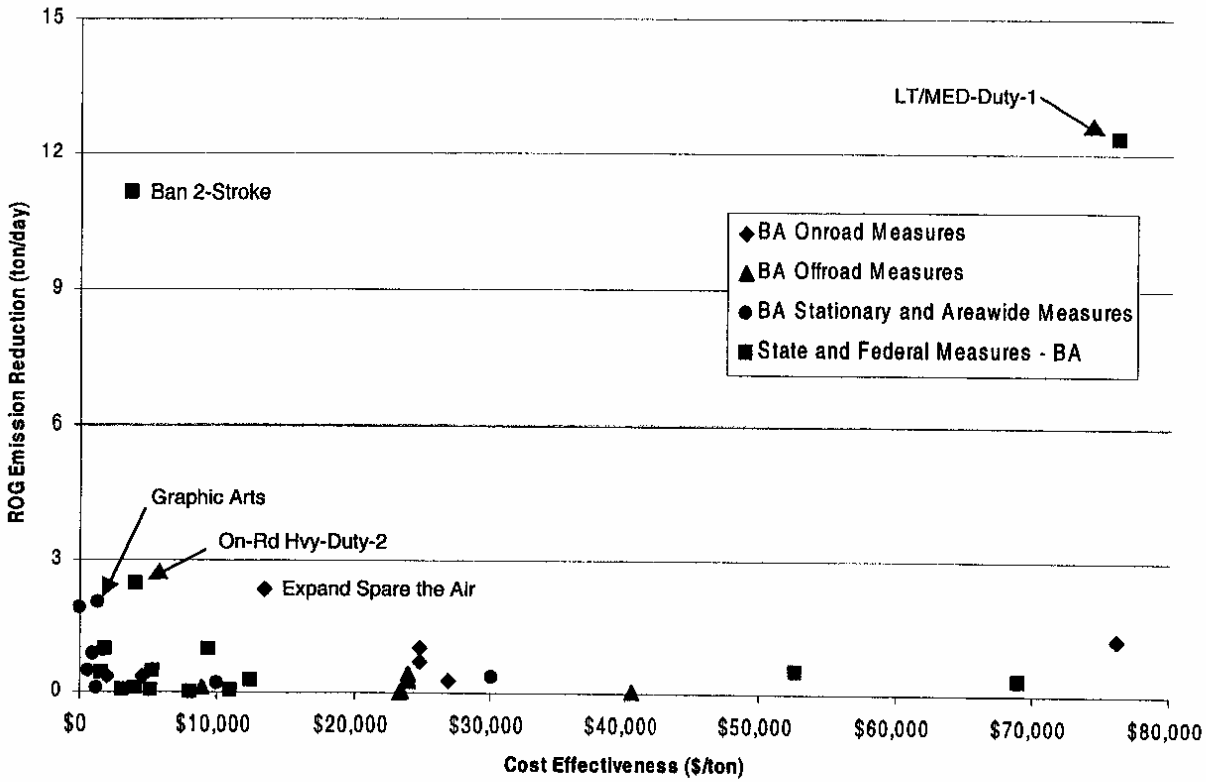
All analysis have the same elements (continued)

- Identified implementation agency and needed resources and authority
- Discussed overall feasibility
  - Emission reduction cost effectiveness, public acceptability, implementation/ enforcement, technical feasibility
- Cited resources and references
- Evaluators made preliminary RACM conclusions
- Jones & Stokes performed preliminary environmental impact in CEQA format
- Calculations are provided in back-up spreadsheets (Excel)

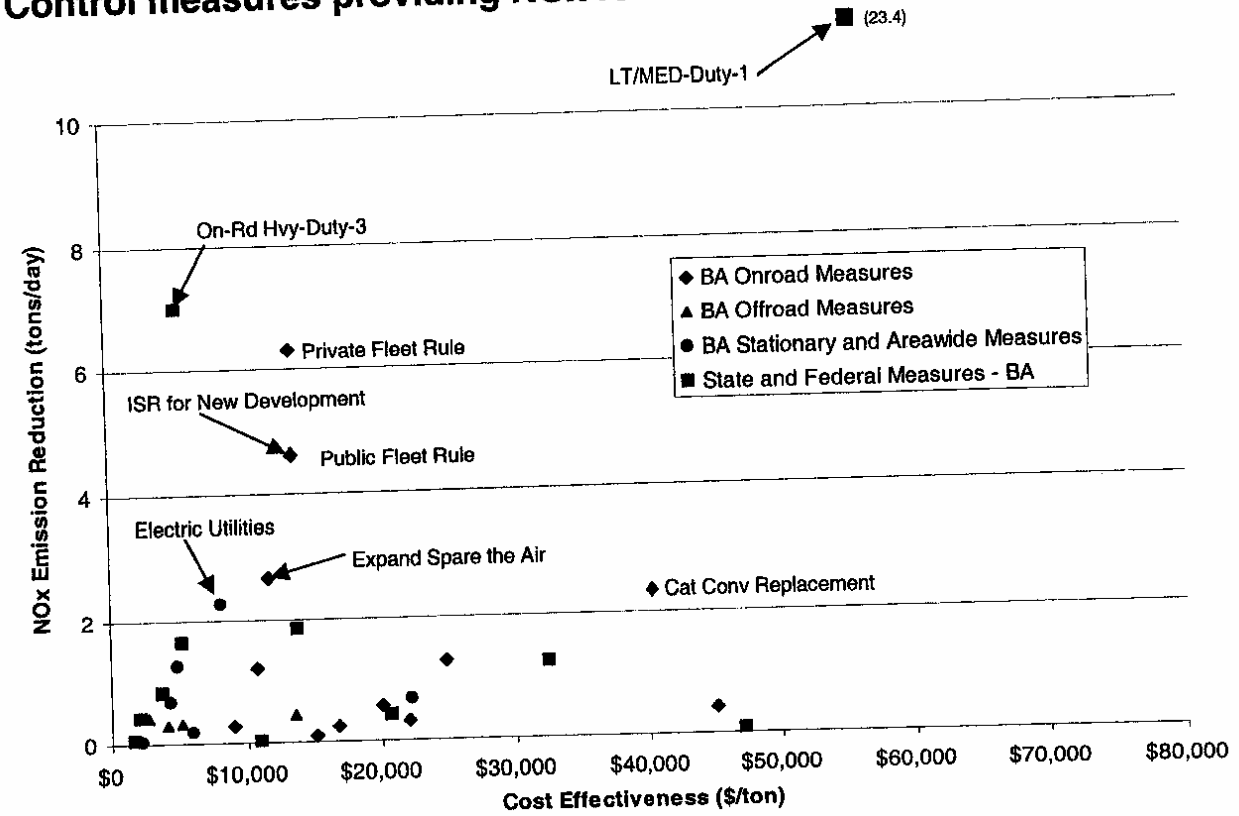
Agenda

1. Bay Area Methodology
2. Overview of Analysis
3. Effectiveness of Control Measures
4. Summary

Control measures providing ROG reductions



Control measures providing NOx reductions



INCENTIVE FUNDING

Funding Programs (Revenue Sources)

DMV	$20,000,000

Programs to Fund (Based on Funding Revisions and Cost Effectiveness)

Enhanced Spare the Air		$ 490,567 - $527,088
Fleet Modernization	(2005)	$ 12,493,415
EGRT Retrofit	(2007)	$ 12,145,740
Heavy-Duty Repowers		$ 6,952,371 - $ 7,281,303

New Programs to Fund (Based Cost Effectiveness)

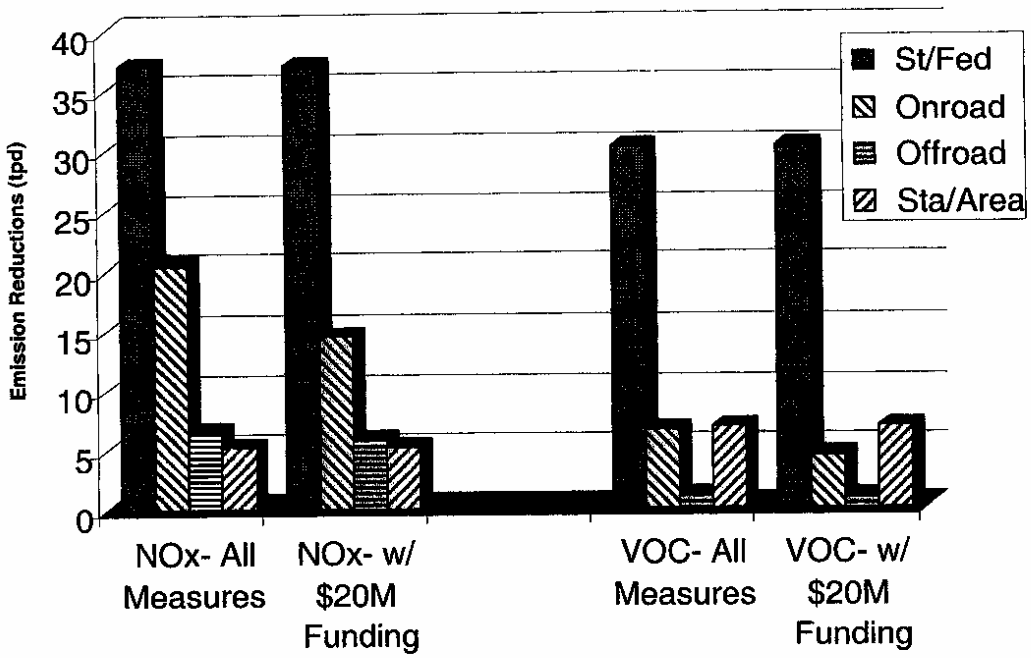
Ag pump electrification incentives		$ 101,196 – $ 112,124
Voluntary Pleasure Craft Ban (STA)		$ 46,849 – $ 49,137
Lawn Mower Buyback		$ 320,487 – $ 325,162
Fleet Modernization	(2007)	$ 2,941,632
Cleaire Longview	(2007)	$ 10,963,397
Dual Fuel Retrofit		$ 51,034,773 – $ 57,852,710
Emulsified Fuel		$ 6,926,173 – $ 7,487,120
Cat. Converter Replacement	(2007)	$ 172,000,000
Community Design	(2007)	$ 21,700,000

	Funding = $20,000,000		Additional Funding		
	NOx (tpd)	VOC (tpd)	Funding Level	NOx (tpd)	VOC (tpd)
2005	3.21	2.38	$78,988,314	5.40	2.86
2007	4.27	2.16	$313,864,377	14.57	4.26

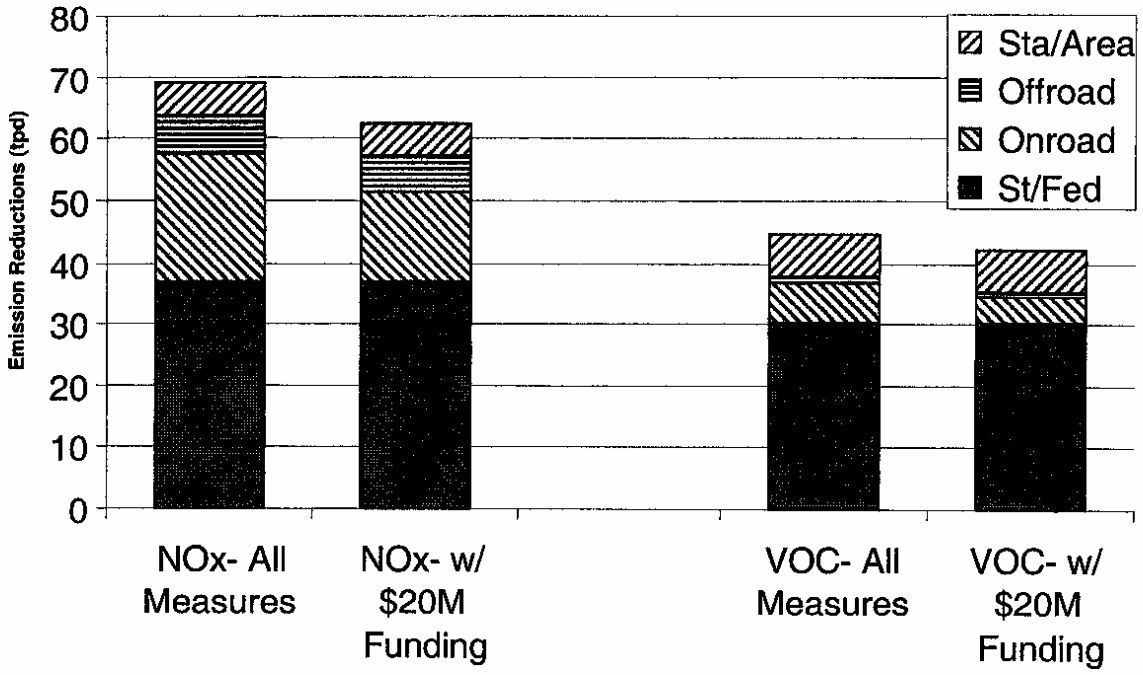
Measure No.	Description	2005 Reduction NOx	2005 Reduction ROG	2005 Costs Cost	2005 Costs CE-NOx	2005 Costs CE-ROG	2007 Reduction NOx	2007 Reduction ROG	2007 Costs Cost	2007 Costs CE-NOx	2007 Costs CE-ROG	Notes
ONMS-52/ ONMS-374	Heavy-duty Repowers	0.249	0.015	$ 6,952,371	$ 16,898		0.757	0.044	$ 7,281,303	$ 17,059		Adjusted to 1.35% /year installation rate
ONMS-52/ ONMS-52a	Cleaire Longview System						0.579	0.063	$ 10,963,397	$ 19,953		
ONMS-52/ ONMS-52b	Johnson Matthey EGRT						1.219	0.115	$ 12,746,740	$ 10,785		Adjusted to 3.85% /year installation rate
ONMS-52/ ONMS-[illegible]	Fleet Modernization for HDV	0.279	0.020	$12,493,[illegible]	$ 9,048		1.135	0.076	$ 22,941,632	$ 9,636		Adjusted to 2.00% /year installation rate
ONMS-52/ ONMS-255	Dual Fuel Retrofit	1.307	0.069	$51,034,773	$ 25,182		4.211	0.212	$ 57,852,710	$ 24,437		
ONMS-52/ MISC-31	Emulsified Fuel	0.421	0	$ 6,926,173	$ 45,119		1.236	0	$ 7,487,120	$ 50,887		
OFMS37	Lawn Mower Buyback	0.001	0.005	$ 325,162		$ 23,404	0.003	0.022	320,487		$ 24,673	
TCM-159	Enhance Spare the Air	2.680	2.340	$ 2,499,567	$ 14,733		2.290	2.000	$ 627,068	15,369		Cost is for increased incentive over current program
TCM-159/ OFMS13	Vol. Pleasure Craft Ban	0.111	0.365	$ 46,849	$ 15,027		0.113	0.308	49,137	15,444		Loss revenue from increased fees (28.1 days/year)
OFMS73	Clean Air Labeling	0.01	0.004	$ 25,000	$ 42,466		0.006	0.003	$ 25,000	$ 73,217		
LU-4	Community Design						0.12	0.11	$ 21,700,000	$119,786		
OFMS14/ OFMS7	Ag Engines -- Normal Life	0.020	0	$ 101,196	$ 6,157		0.11	0.01	$ 112,124	$ 6,822		
OFMS14/ SN-48	Ag Engines -- Early Retire.	0.320	0.04	$ 592,806	$ 5,101		0.45	0.06	$ 458,639	$ 9,526		
ONMS-64	Cat. Converter Replacement						2.338	1.235	$ 172,000,000	$ 40,285		
ONMS-69	Free Gas Caps		0.33	$ 246,077		$ 2,040		0.35	$ 246,077		$1,946	

	2005 NOx	2005 ROG	2005 Cost	2007 NOx	2007 ROG	2007 Cost
Low	3.21	2.38	$19,036,354	14.27	2.16	$ 19,654,192
High	5.40	2.86	$78,988,314	14.57	4.26	$ 313,884,377

Comparison of Emission Reduction by Authority



Total Emission Reductions



Comparison of Bay Area and Sacramento Nonattainment Regions

	Bay Area Nonattainment Region	Sacramento Nonattainment Region
Population	6.6M (2000)	1.8M (2001)
Exceedance Days (2003)		
•Federal 1-hr std	1	6
•State 1-hr std	19	51
Inventory		
•NOx (tpd)	605 (2003)	157 (2005)
•ROG (tpd)	497 (2003)	121 (2005)

Agenda

1. Bay Area Methodology
2. Overview of Analysis
3. Effectiveness of Control Measures
4. Summary

- See similar trends between Bay Area and Sacramento. Higher reductions possible in Bay Area due to larger inventory
- State and Federal measures have the most leverage
- Off-road and stationary / area source control measures are significant but small relative to State and Federal Measures
- Proposed Fleet Rules have large impact
- Incentive funding is needed to get additional reductions from local on-road and off-road measures

- Changes in measure implementation and scope have occurred since the preliminary Sacramento analysis -- particularly with the Bay Area specific measures.
- A comparing the current measures to the BAAQMD measure list presented on January 20, 2004, gives the following observations:
  - several measures were classified as "Already Implemented", but may not have the same level of control measures analyzed
  - level of emission reductions that BAAQMD characterizes as negligible seems high in some cases
  - jurisdiction of on-road and off-road sources may need to be discussed to understand the reasons for rejecting these measures; e.g. fleet rules appear to be measures available to districts with a state nonattainment area classification of serious

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

ATTACHMENT 4

March 3, 2004

Karen Wilson
Manager, Strategic Planning Division
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814

Dear Karen:

At our meeting on February 18, 2004, Sacramento Metropolitan Air Quality Management District (SMAQMD) staff and your consultant (Tiax) provided tables, presentations, and disks of information regarding potential ozone control measures for the Bay Area Air District to consider as we prepare our draft Ozone Strategy. We thank you for your suggestions and will give them a thorough review.

At the meeting, we agreed to give you a timeframe for our review of the information you provided. We expect to complete our review by May 2004, in time to incorporate the results of our review into our draft Ozone Strategy. I will contact you when we have completed our review to schedule a staff to staff meeting to discuss our analysis.

Our next Ozone Working Group (OWG) meeting is March 23, 2004, at the offices of the Metropolitan Transportation Commission beginning at 9:30 a.m. We hope SMAQMD staff will be able to attend. The OWG provides an excellent opportunity for all stakeholders, including SMAQMD, to participate in our planning process. I would like to let you know that the materials we present at the March OWG meeting regarding control measure evaluations and control measure descriptions will not be updated based on your most recent input, given the timeframe I indicated above. Of course, the materials will reflect our evaluation of earlier input, by SMAQMD and others.

Please feel free to give me a call at 415-749-4646 if you have any questions.

Sincerely,

Jean Roggenkamp
Director of Planning and Research

cc: B. Tollstrup, SMAQMD

939 ELLIS STREET • SAN FRANCISCO CALIFORNIA 94109 • 415.771.6000 • *www.baaqmd.gov*

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

ATTACHMENT 5

Norm Cov
AIR POLLUTION CONTROL OFFIC

March 5, 2004

Jack Broadbent
Air Pollution Control Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109-7714

Dear Mr. Broadbent,

I would like to thank you and your staff for your participation in a productive exchange of information regarding air quality planning issues at our meeting on February 18, 2004. At that meeting, we provided you with information on Bay Area measures we have analyzed for their emission reduction potential. Your staff indicated that they had seen most of the measures as we were developing the analysis, but requested further time to review and comment before we submit the information to the Air Resources Board.

It is my understanding that the information your staff requested has been sent to Jean Roggenkamp. As we discussed at the meeting, it is appropriate that our analysis be forwarded to ARB for consideration as it identifies all feasible measures for implementation in accordance with its Transport Mitigation Regulation.

We will transmit the analysis to ARB in early April. Accordingly, we request that you provide us with any comments you may have by Friday, March 26 so that we may incorporate them into our transmittal.

Thank you again for the attention you and your staff have given this matter.

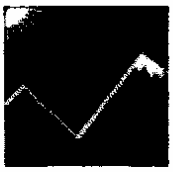
Sincerely,

Norm Covell
Air Pollution Control Officer

cc: Larry Greene, APCO, Yolo-Solano AQMD
Tom Christofk, APCO, Placer County APCD
Marcella McTaggart, APCO, El Dorado County AQMD
Steve Speckert, APCO, Feather River AQMD

777 12th Street, 3rd Floor Sacramento, CA 95814-1908
916/874-4800 916/874-4899 fax

ATTACHMENT 6



San Joaquin Valley
Air Pollution Control District

Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone

December 31, 2002

Table 4-3 (continued)

Category	Current Rule #	Pollutant	2005 Baseline Emissions (tons/day)	Reference[1]	Comments
Cutback Asphalt Application	4641	VOC	1.6	APS	District will investigate feasible controls for further reductions.
Dryers & Dehydrators		NOx	Unknown	Houston	Emission Inventory development needed.
Fluid Catalytic Cracking Units		NOx	Unknown	Houston	Emission Inventory development needed.
Furnaces		NOx	Unknown	Houston	Emission Inventory development needed.
Glass Melting Furnaces	4354	NOx	11.9	APS; Houston	District will investigate feasible controls for further reductions.
Indirect Source Mitigation Fee		**VOC/NOx**	**Unknown**	**Staff; public comment**	**Fees would be collected from new land development and used to fund air quality incentive programs. Longer lead-time is needed to assess public support and feasibility.**
Water Heaters & Boilers, 75,000 Btu/hr – 2 MMBtu/hr	**4305**	**NOx**	**Unknown**	**APS**	**Emission Inventory development needed.**
Livestock Waste		**VOC**	**82.9**	**SCAQMD; Public**	**Emission Inventory refinement needed. Longer lead-time needed for emission control technology assessment.**

State of California
AIR RESOURCES BOARD

STATUS REPORT

OZONE TRANSPORT MITIGATION IN CALIFORNIA

Release Date: **April 8, 2004**
Meeting Date: **April 22-23, 2004**

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: http://www.arb.ca.gov.

California Environmental Protection Agency
AIR RESOURCES BOARD

State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

Staff Report

OZONE TRANSPORT MITIGATION IN CALIFORNIA

Air Resources Board Meeting
Begins April 22, 2004 at 9:00 a.m.
and may continue April 23, 2004 at 8:30 a.m.
Air Resources Board
Central Valley Auditorium
1001 I Street
Sacramento, California 95814

Meeting notice available at
http://www.arb.ca.gov/aqd/transport/mitigation/mitigation.htm.

This report and related materials are available for downloading from the Air Resources Board's Internet site at http://www.arb.ca.gov/aqd/transport/mitigation/mitigation.htm. In addition, written copies may be obtained from the Board's Public Information Office, 1001 I Street, 1st Floor, Environmental Services Center, Sacramento, California 95814, (916) 322-2990.

If you are a person with a disability and desire to obtain this document in an alternative format, please contact the Americans with Disabilities Act Coordinator at (916) 323-4916, or TDD (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area.

QUESTIONS

If you have questions concerning this report, please contact:

Ms. Kim Heroy-Rogalski, P.E.
Staff Air Pollution Specialist
Phone: (916) 327-2200
Email: kheroyro@arb.ca.gov

INTRODUCTION

Unhealthy ozone levels in an area often result from a combination of emissions generated by local sources and pollution blown in or transported from other regions of the State. Consequently, mitigating the transport of ozone and ozone-forming pollutants within California is an important part of the State's efforts to achieve health-based ambient air quality standards.

Over the last decade, California has continued to strengthen both the science of pollution transport and the regulatory framework to reduce transport. In the last year, the Air Resources Board (ARB or Board) and the local air pollution control and air quality management districts (districts) have focused on improving coordination between regions and identifying feasible emission controls to further cut ozone levels.

This status report on ozone transport mitigation does the following:

- Reviews how transport of ozone pollution is addressed in California law,
- Identifies the transport relationships among California regions,
- Summarizes changes made in 2003 to the transport mitigation regulation,
- Provides an update on the status of transport mitigation,
- Describes the regional coordination activities underway, and
- Discusses the direction staff expects to take in the next few years to further understand, characterize, and mitigate ozone pollution transport.

Transport in California State Law

An "upwind" area is a generator of transported emissions, while a "downwind" area is a receptor of transported emissions. The California Clean Air Act (the Act) directs the ARB to periodically assess transport in terms of the contribution of ozone and ozone precursors in upwind regions to ozone concentrations in downwind regions. In addition, the Act directs ARB to establish mitigation requirements for upwind districts commensurate with their contributions to downwind air quality problems. The laws on transport are found in section 39610 of the California Health and Safety Code (H&SC). The regulations relating to transport are in title 17 of the California Code of Regulations (CCR) sections 70500, 70600, and 70601.

The Act requires districts to develop plans to attain the State ambient ozone standard and update the plans every three years (H&SC sections 40911 and 40925). The Act also requires that the combination of plans for upwind and downwind districts provide for attainment and maintenance of the ozone standard in both regions (H&SC section 40912). While there are no deadlines for attainment, the Act requires steady progress by either reducing emissions of each ozone precursor (i.e., reactive organic gases and oxides of nitrogen) by five percent per year or by adopting all feasible measures (H&SC section 40914). Districts subject to this requirement are pursuing the all feasible

measures path. Finally, each upwind district's plan must satisfy the mitigation requirements established by ARB pursuant to H&SC section 39610.

Transport Assessments

Over the last decade, ARB has done a series of technical assessments of transport relationships between air basins in California. The assessments identify transport couples consisting of an upwind and a downwind area. ARB also characterizes the contribution of transported pollutants as overwhelming, significant, or inconsequential. The influence of transport on a downwind area can vary widely day by day, depending mostly on the weather. As a result, a transport couple can have multiple characterizations. ARB approved the initial assessment in 1990, and updated the assessment in 1993, 1996, and 2001. Table 1 lists the identified transport couples within California.

TABLE 1
CALIFORNIA TRANSPORT COUPLES

Air Basin Impacted by Transport (Downwind Area)	Origin of Transport (Upwind Area)
Broader Sacramento Area	San Francisco Bay Area San Joaquin Valley
Great Basin Valleys	San Joaquin Valley
Mojave Desert	South Coast San Joaquin Valley Mexico
Mountain Counties	Broader Sacramento Area San Joaquin Valley San Francisco Bay Area
North Central Coast	San Francisco Bay Area San Joaquin Valley
North Coast	San Francisco Bay Area
Salton Sea	South Coast Mexico
San Diego	South Coast Mexico
San Francisco Bay Area	Broader Sacramento Area
San Joaquin Valley	San Francisco Bay Area Broader Sacramento Area
South Central Coast	South Coast California Coastal Waters San Joaquin Valley San Francisco Bay Area
South Coast	South Central Coast
Upper Sacramento Valley	Broader Sacramento Area

From title 17 California Code of Regulations, section 70500(c) Transport Identification Table

The body of knowledge developed through the assessments has yielded a practical understanding of the fundamental transport relationships among California regions. We know that urbanized areas largely cause their own air pollution. We know under what weather conditions these urban areas can receive pollution from their upwind neighbors and under what conditions they can transport pollution to their downwind neighbors. And finally, we know that depending on the weather patterns, the magnitude of the impact on the same downwind area can change substantially depending on the day.

ARB staff's analytical transport work continues. In addition to the established practice of examining weather patterns, air flow, and pollution levels to identify transport couples, staff is developing additional modeling tools as part of the Central California Ozone Study and the Southern California Ozone Study to apply to future transport analyses. This work is the next step in the evolution of transport assessment—integrated evaluation of control strategies and pollution transport across air basins within the same modeling domain. The work is beginning to enhance our understanding of the fundamental transport relationships already identified. Based on the ongoing transport analyses, ARB staff is not proposing any new transport couples at this time.

TRANSPORT MITIGATION REQUIREMENTS AND IMPLEMENTATION STATUS

ARB first adopted transport mitigation regulations in 1990. The 1990 regulations established mitigation requirements for upwind areas found to have either overwhelming or significant impacts on downwind areas. The primary mitigation requirement was to accelerate application of best available retrofit control technology (BARCT) to major stationary sources in upwind districts.

The Board amended its transport regulations in 1993 and further strengthened the regulations in May 2003. The 2003 amendments requires upwind districts to: (1) adopt all feasible measures for ozone precursors until the downwind region attains the State ozone standard, unless the measure is not needed in the downwind region, and (2) adjust no net increase thresholds for requiring offsets to be at least as stringent as those of the downwind district. No net increase thresholds are part of a district's stationary source permitting program; new or modified stationary sources with emissions or the potential to emit above the threshold must offset their emissions increase with additional emission reductions from elsewhere at the source or from other sources. The end result is no net increase in emissions within the district.

ARB staff is monitoring district compliance with the new requirements for all feasible measures and adjusted no net increase thresholds through review of district triennial California Clean Air Act plans (required by H&SC section 40925) and rulemaking activities.

The two new transport mitigation requirements are described in further detail below, along with a summary of recent district actions to comply.

All Feasible Measures

Districts that violate the State ozone standard are already required to adopt and implement all feasible measures unless they can demonstrate a five percent annual reduction in emissions. The 2003 amendments establish a continuing obligation for upwind districts to pursue these measures, regardless of their attainment status, until their downwind neighbors attain the State ozone standard. The amendments also require each upwind district to review its list of control measures in consultation with its downwind neighbor district and make a finding as to whether the list of control measures meets the all feasible measures requirement.

Districts can opt out of the all feasible measures requirement under certain conditions. For example, a district need not require all feasible measures if it demonstrates that emissions from a source do not contribute to ozone violations in any downwind area, or if the most recent transport assessment demonstrates that the district's transport impact is inconsequential. Such demonstrations must be included in the district's air quality plan and approved by ARB.

ARB has defined all feasible measures in title 17, CCR, section 70600(a)(1) as:

> *...air pollution control measures, including but not limited to emissions standards and limitations, applicable to all air pollution source categories under a district's authority that are based on the maximum degree of reduction achievable for emissions of ozone precursors, taking into account technological, social, environmental, energy and economic factors, including cost-effectiveness.*

The all feasible measures benchmark evolves over time as new technology is developed to reduce emissions and districts adopt more effective rules in response. While each district is responsible for doing its own analysis of all feasible measures, it is useful to compile references to the most stringent district rule within the State for common source categories with significant emissions. These reference documents can aid each district's assessment of its own rules and comparison to the California benchmark. ARB and district staffs have typically worked together to evaluate rules and develop these references. In 1999, ARB staff released a comprehensive list of all feasible measures entitled Identification of Performance Standards for Existing Stationary Sources: A Resource Document.

In the past year, the districts, under the auspices of the California Air Pollution Control Officers Association (CAPCOA), and ARB have made noteworthy progress in updating this document and other resources to identify what the all feasible measures are for the current round of California Clean Air Act plans. Together, we have also conducted a direct rule comparison among the transport-coupled air basins for the San Francisco Bay Area, the Broader Sacramento Area, and San Joaquin Valley.

CAPCOA Potential All Feasible Measures List for Stationary Sources CAPCOA has responded vigorously to the all feasible measures and consultation requirements for

upwind areas. The Rules Subcommittee of CAPCOA's Engineering Managers Committee developed a list of potential all feasible measures meant to supplement the 1999 ARB document. The Rules Subcommittee solicited stationary source rules from each district that they believed would qualify as an all feasible measure. With participation from ARB staff, the Rules Subcommittee then evaluated the stringency of the rules submitted and culled them into a list of potential all feasible measures. Table 2 describes the source categories included in the CAPCOA potential all feasible measures list. At its December 2003 meeting, the CAPCOA Board approved the Potential All Feasible Measures List for Stationary Sources for distribution to districts and ARB.

The Rules Subcommittee also prepared a list of measures that districts had submitted but which did not meet the all feasible measures criteria and an explanation of why they did not qualify. This list will also help support the all feasible measures analyses. Finally, the Rules Subcommittee prepared a summary of the various factors that a district should evaluate when determining whether a certain rule is a feasible measure for that particular district. The factors included cost-effectiveness, socioeconomic impacts, public acceptability, the number and age of affected sources in the district, and the existing level of control.

We appreciate the level of district commitment and resources invested in developing CAPCOA's Potential All Feasible Measures List. The document is an important tool for district staffs to use in preparation of California Clean Air Act plans. We look forward to working with CAPCOA to revisit and update the list periodically to reflect control technology advances as new rules are implemented around the State.

Some districts have already submitted their 2003 California Clean Air Act ozone plans to ARB. Other districts are still working on their plans. As ARB staff reviews the plans, staff will look at the district rulemaking commitments with respect to the all feasible measures requirement to determine if the districts have identified all opportunities for emission reductions. Staff expects to provide feedback to districts when there appear to be opportunities for additional rulemaking commitments.

TABLE 2
SOURCE CATEGORIES IN
2003 CAPCOA POTENTIAL ALL FEASIBLE MEASURES LIST

Adhesives and sealants
Aerospace assembly and component manufacturing
Architectural coatings
Boilers, steam generators, and process heaters
Commercial charbroiling
Degreasing operations
Equipment leaks (valves and flanges)
Food product manufacturing and processing
Gasoline transfer and dispensing
Glass coatings
Graphic arts
High volume spray booths
Hydrogen plant vents
Large water heaters and small boilers
Lime kilns
Metal parts and products coatings
Organic liquids
Polyester resin operations
Polystyrene, polyethylene, and propylene foam products
Residential water heaters
Soil decontamination
Solid waste disposal
Solvent cleaning operations
Solvent use
Storage tanks
Vehicle refinishing
Wood coatings
Wood flat stock coatings

No Net Increase Thresholds

The 2003 amendments to the transport mitigation regulation also require upwind districts to update their no net increase thresholds by December 31, 2004, to be as stringent as the threshold for their downwind district(s). The purpose is to ensure that upwind and downwind couples are taking comparable actions in their permitting programs. As shown in Table 3, the Bay Area Air Quality Management District and the five districts located in the Broader Sacramento Area must amend their new source

review (NSR) rules to lower their no net increase emission thresholds to the level used by the San Joaquin Valley Unified Air Pollution Control District. All have indicated their intention to make the needed changes by the end of this year.

TABLE 3
DISTRICTS THAT NEED TO LOWER
THEIR NEW SOURCE REVIEW NO NET INCREASE THRESHOLDS

District	No net increase threshold [tons per year]	
	Current	Required
Bay Area Air Quality Management District	15	10
El Dorado County Air Quality Management District	15	10
Feather River Air Quality Management District*	25	10
Placer County Air Pollution Control District	15	10
Sacramento Metropolitan Air Quality Management District	15	10
Yolo-Solano Air Quality Management District	15	10

* The Feather River District may choose to limit the 10 tons per year threshold to just the portion of Southern Sutter County within the Broader Sacramento Area.

REGIONAL COORDINATION

There has also been tremendous progress over the last year in improving coordination between districts affected by transport as they seek to meet both federal and State ambient air quality standards. CAPCOA successfully crafted a procedural framework that districts may use to address planning and rulemaking issues related to transport. Specific to Northern California, Air Resources Board Members are leading an air agency group focused on exploring and resolving long-standing transport issues.

CAPCOA Transport Protocol

In December 2002, with ARB's transport mitigation regulation update underway, the CAPCOA Board set a goal to achieve consensus on a protocol for districts to use in dealing with transport issues. Over the course of 2003, participating districts developed the CAPCOA Pollution Transport Protocol (see Appendix A). The focus of this protocol is two-fold. First, the protocol outlines a process for districts to coordinate with each other and ARB staff on transport-related technical work for plans to meet federal and State air quality standards. Second, it acknowledges that disputes over pollutant transport can occur, and sets up a process to resolve disputes between districts at the local level. The protocol is designed to provide more detail on how districts can manage transport issues, consistent with the requirements of ARB's transport mitigation

regulation. Individual districts may choose to use the protocol as developed or adapt it for their specific situations.

Although the protocol is voluntary and not legally binding, ARB staff believes that it sets up a useful and workable framework for addressing transport. We are optimistic that the protocol will facilitate districts working together to resolve pollution transport issues.

The contents of the CAPCOA protocol are summarized below:

- **Upwind districts should adopt all feasible measures for stationary sources.** If any district in California has a rule limiting emissions of ozone precursors for a source category, the protocol states that all upwind districts should adopt a rule for that source category designed to achieve at least the same percentage control of emissions within the same time frame. Exceptions include if (a) the rule would cost more than $15,000 per ton to implement, (b) the rule would provide de minimis benefits, (c) there is implementation uncertainty for the previously adopted rule, or (d) the district board determines that the rule is infeasible based on technological, social, environmental, economic, or energy factors.

- **Upwind districts should consider transportation control measures (TCMs) adopted by other air districts.** TCMs are strategies designed to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion. The protocol calls on districts to make a good faith effort to implement TCMs designed to achieve the same percentage control of the same activity as TCMs adopted by other California districts. CAPCOA has undertaken a complementary new effort to develop a reference document for districts on transportation-related strategies (such as TCMs and clean fleet incentives) being implemented around California. Such local strategies can complement the State's actions to reduce transportation emissions.

- **Upwind and downwind districts should engage in a cooperative process to allocate emission control responsibilities.** The protocol encourages district executive, modeling, and planning staffs to meet periodically. Upwind and downwind district staff and ARB staff should participate in modeling coordination working groups. Upwind districts should show that their air quality plans contain sufficient measures to eliminate transport that by itself can cause an exceedance of the federal ambient air quality standards in a downwind district.

- **Disputes among districts related to pollution transport should be resolved at the lowest level possible.** CAPCOA supports a hierarchy of meetings, first among district management and then among district board members, using a mediator if necessary.

Northern California Air Quality Coordinating Group

Over the past year, Air Resources Board Members have been leading meetings with elected officials and district executive staff from the Bay Area, Sacramento, Yolo-Solano, and San Joaquin Valley air districts to discuss transport-related issues. These meetings represent a constructive model for the kind of cooperation that is essential to evaluate the facts relative to transport concerns and to build consensus on how to resolve them.

In response to these discussions, the staffs of the Sacramento, San Joaquin, Bay Area, and Yolo-Solano air districts have been working cooperatively with the ARB staff to evaluate and compare rules for a number of source categories. For each category examined, staff prepared a detailed comparison of each rule element – emission limits, applicability, exemptions, inspection requirements, etc. In addition to comparing the rules among the participating districts, the technical group identified the most effective rule in California for each source category. District and ARB staff reached consensus on analyses for the following source categories:

- Adhesives
- Boilers
- Can and coil coating
- Degreasing
- Graphic arts
- Internal combustion engines
- Solvent cleaning
- Storage of organic liquids
- Turbines
- Valves and flanges
- Vehicle refinishing

Where differences among rules were identified, the Northern California district staff reached consensus on which districts had the potential to achieve additional emission reductions through a rule revision. District staffs made commitments to undertake rule development and/or further evaluations to see if rule revisions were justified. The districts are folding the results of the rule comparison effort into their upcoming California Clean Air Act plans.

THE FUTURE OF TRANSPORT ASSESSMENT AND MITIGATION

Over a decade of technical work has provided a good understanding of the fundamentals of pollutant transport statewide, including the basic transport relationships among air basins. With much more extensive air quality and meteorological data becoming available from field studies, ARB staff has begun to take the next step in transport analyses. Future transport analyses will take advantage of two regional field studies that together cover nearly all of the State—the 1997 Southern California Ozone Study (SCOS) and the 2000 Central California Air Quality Study, which is comprised of

the California Regional Particulate-Matter Air Quality Study and the Central California Ozone Study (CCOS).

The vast size of the domains studied under both CCOS and SCOS will significantly improve our ability to investigate transport phenomena. These studies will allow for better three-dimensional characterization of transport. In addition, the regional air quality models developed as part of the studies will provide tools to examine transport from a broader regional, rather than transport couple, perspective.

The regional models are already being used to develop clean air plans to meet the federal one-hour ozone standard. These tools are helping us assess the benefits of existing and new control strategies in both upwind and downwind regions throughout the modeled domains. ARB and districts are developing ozone episodes for modeling that involve meteorological conditions conducive to transport. This modeling should help us fine tune our understanding of how changes in upwind and downwind emissions affect ozone levels downwind for use in future State Implementation Plans and California Clean Air Act plans. The next steps are to project the level of control needed to attain the federal eight-hour ozone standard and ultimately the State ozone standard.

As this status report has described, the last year has seen considerable progress in mitigating the transport of ozone pollution throughout California. The districts and ARB together have focused renewed attention on defining all feasible measures, comparing rules among districts, and handling transport disputes among districts. The key to the future is maintaining this momentum.

ARB staff expects that the rule comparison work of the Northern California Air Quality Coordinating Group will translate into rulemaking commitments in the Northern California districts' plans. We are optimistic that other districts will embrace the all feasible measures process described in the new CAPCOA Pollution Transport Protocol to find additional emission reduction ideas from an innovative or more effective rule in another district. Both upwind and downwind districts will reap air quality benefits from such efforts.

As districts are working to find and implement every feasible measure, ARB continues to identify and develop new strategies to achieve cost-effective emission reductions from sources under our jurisdiction. In addition to the Board's existing programs, ARB has an ambitious rulemaking calendar set forward as part of the 2003 State and Federal Strategy of the California State Implementation Plan. As these measures take effect, emissions all across the State will be reduced, and thus transport of pollution among all regions will be further decreased.

Appendix A
CAPCOA Transport Protocol

CAPCOA

POLLUTION TRANSPORT PROTOCOL

(Approved by the CAPCOA Board on 1/22/04 and 2/26/04 for use as an instrument to develop Memoranda of Understanding among Air Districts)

SECTION 1. ALL FEASIBLE MEASURES

(a) **Supplemental AFMs Provisions for Ozone.** Every district that is subject to a requirement in the California Air Resources Board ozone transport mitigation regulations (title 17, Cal. Code Regs. §70600, 70601) to adopt "All Feasible Measures" (AFMs) shall comply with the following Supplemental AFMs Provisions:

(1) **Consideration and Adoption of Rules From Other Districts.** The district shall adopt a rule based upon each rule limiting emissions of ozone precursors that has been adopted by another California air district, except as provided in paragraph (3) below (Exceptions Due to Infeasibility). In complying with this requirement, the district need not adopt the specific language of a rule adopted in another district, but shall adopt a rule that is designed to achieve, at a minimum, substantially the same percentage control of emissions from substantially the same source category, within the amount time from rule adoption allowed by such other district, and with comparable enforceability.

(2) **Time of Rule Adoption**. Rules required by paragraph (1) above shall be adopted no later than two years after initial adoption of a rule by another air district, or two years after approval of this protocol, whichever is later. A district may delay adoption of a rule beyond such times to the extent necessary to avoid delaying adoption of another rule or rules that will achieve greater emission reductions within the same time.

(3) **Exceptions Due to Infeasibility.** A district is not required to adopt a rule pursuant to this section if any of the following exceptions apply—

(A) **Not Cost-Effective**. The governing board of the district subject to the AFMs requirement finds that implementation of the rule would not be cost-effective in that district. Cost-effectiveness of the rule in the

district subject to the AFMs requirement shall be calculated based on the circumstances and types of sources in that district. A rule shall be considered cost-effective if it is no more expensive to implement than the most expensive cost-effectiveness determined for such a rule by another district, except that a district may determine a rule to be not cost-effective if it will cost more than $15,000 per ton to implement. This cost level will adjust based on the CPI change from 2003.

(B) **De Minimis Benefits**. The governing board of the district subject to the AFMs requirement finds that implementation of the rule would not produce emission reductions in that district exceeding a level that the board determines to be de minimis. A district may not use this exception to reject adoption of a rule unless the district adopts an alternative rule or other enforceable strategy. The alternative rule shall be adopted within 18 months and shall achieve surplus emission reductions that are equivalent to, and in the same time as, mass emission reductions that the rejected rule would have achieved.

(C) **Implementation Uncertainty.** The previously-adopted rule—

(i) was determined by the district that adopted it to be technology-forcing, and has not yet been implemented, or

(ii) is subject to a condition precedent to implementation such as a feasibility assessment, and such condition has not yet been satisfied, or

(iii) was not submitted for inclusion in the SIP because the air district desired to avoid the need to obtain EPA approval to modify the rule, or

(iv) has not been implemented by 25% or more of the sources affected by such rule, because such sources are under variance.

(D) **Infeasibility Due To Other Factors**. The governing board of the district subject to the AFMs requirement finds that the rule is infeasible in that district based on technological, social, environmental, economic or energy factors specified by the board. This exception is subject to the following limitations:

(i) A rule that would be cost-effective as defined in subparagraph (A) above may not be determined to be infeasible under this subparagraph based on inadequate cost-effectiveness.

(ii) A district may not use this exception to reject adoption of a rule that was adopted by a transport-coupled district with an "overwhelming" designation, unless the district adopts an alternative rule or other enforceable strategy. The alternative rule

shall be adopted within 18 months and shall achieve surplus emission reductions that are equivalent to, and in the same time as, mass emission reductions that the rejected rule would have achieved. This requirement to adopt an alternative rule does not apply to a district that is downwind of, and has a lower attainment classification (e.g. "serious," "severe") than, the transport-coupled district.

(4) Transportation Control Measures.

(A) **Compliance With Applicable Laws.** The district shall include TCMs in its state and federal ozone air quality plans that are sufficient to comply with applicable requirements of state and federal law.

(B) **Consideration and Implementation of TCMs From Other Districts.** The district shall make a good faith effort to achieve implementation within its jurisdiction of TCMs that are based on each TCM that is included in a plan adopted by another California air district, except as provided in subparagraph (C) below (Exceptions Due to Infeasibility). In complying with this subparagraph, the district need not attempt to achieve implementation of the specific language of a TCM from another district, but shall attempt to achieve implementation of a TCM that is designed to achieve, at a minimum, substantially the same percentage control of emissions from the same activity, within the amount time from plan adoption allowed by such other district plan, and with comparable enforceability.

(C) **Exceptions Due to Infeasibility.** A district shall not be required to make a good faith effort to achieve implementation of a TCM if any of the Exceptions Due to Infeasibility described in paragraph (3) above apply. For purposes of this provision, any reference to "rule" in paragraph (3) shall also mean "TCM," and the $15,000 per ton maximum cost-effectiveness value specified in subparagraph (3)(A) shall not apply.

(D) **Definition**. As used in this paragraph, the terms "transportation control measures" and "TCMs" means strategies other than air district rules that are designed to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.

(5) Rule Implementation. The triennial plan update pursuant to Health & Safety Code Section 40925 shall include: (1) a comparison of how each adopted rule compares to the to the commitments in the plan in terms of emission reductions and implementation timing; (2) for rules with compliance deadlines that have passed, a description of how compliance has

been achieved (i.e., periodic inspections, complaints, industry outreach); and (3) a description of any violations and penalties associated with the rule.

(b) AFMs for Particulate Matter. Every District that has been determined by CARB to be the source of emissions that have the potential to cause an "overwhelming" impact on attainment of air quality standards for particulates in a downwind district shall adopt AFMs to reduce such emissions. For such an upwind district, the requirements of subsection (a) shall apply to rules to reduce the types of particulate and/or particulate precursor emissions that contribute to exceedances of air quality standards in the downwind district.

(c) Burden of Proof. A district seeking to invoke any exception specified in this section to a requirement to adopt a rule shall substantiate that the exception is applicable.

(d) Dispute Resolution. The Dispute Resolution Procedure set forth in section 3 below shall be invoked in the event of a disagreement between districts regarding compliance with this section.

SECTION 2. EMISSION REDUCTIONS BASED ON MODELING

(a) Transport—NAAQS. Each air district that has been identified by CARB as part of on upwind portion of a transport couple shall include in every air quality plan revision an analysis, based upon the best available modeling or other data, showing that the plan contains sufficient measures to eliminate transport that, by itself, can cause an exceedance of the federal ambient air quality standards for ozone or particulate matter in a downwind district. This analysis shall show that such exceedances will not occur on and after the date that the downwind district must attain the federal ambient air quality standards. The analysis shall be conducted with input from downwind districts, as described in section 4 below (Coordination of Planning and Modeling).

(b) Significant Transport. Each district that is part of a transport-couple designated by CARB as "significant" or "overwhelming" shall engage in a cooperative process to allocate emission control responsibilities between the upwind and downwind districts to achieve the federal and state ambient air quality standards for ozone and particulate matter. As part of this process, downwind and upwind districts shall attempt to quantify—

(1) the amount of additional reductions in transported emissions that will be needed in the downwind district after the downwind district applies all feasible controls to sources within its jurisdiction,

(2) the amount of additional reductions that the upwind district can feasibly contribute to satisfy such need, and

(3) the amount of any remaining shortfall, and the emission reductions needed from sources within the regulatory jurisdiction of the state and federal governments to eliminate that shortfall.

At a minimum, such process shall include periodic meetings and exchange of information between APCOs and modeling and planning staffs according to schedules consistent with federal plan submission deadlines.

(c) **Downwind Plan Allocation for Transport Reductions.** Upwind districts shall assist downwind districts to include, in their attainment plans for state and federal ozone and particulate matter standards, allocations for pollutant reductions that will occur through implementation of the adopted upwind district plan. As part of such assistance, upwind districts shall attempt to quantify the pollutant reductions that will be achieved in the downwind district by implementation of the adopted upwind district plans. Upwind districts shall, if requested, assist downwind districts in obtaining CARB and EPA approval for such plan allocations.

(d) **Dispute Resolution.** If, after a good faith effort, it appears to any party that the process described in subsection (b) above will not achieve consensus in time to comply with deadlines for submission of plans, or if there is any other disagreement between districts regarding implementation of this section, the dispute resolution procedure specified in section 3 below shall be invoked.

SECTION 3. DISPUTE RESOLUTION

It is intended that disputes among districts related to issues within air pollution transport should be solved at the lowest levels. Of course, this depends on the nature of the difference and where it may occur in the process. Generally, CAPCOA supports a hierarchy of meetings, first between APCOs, then between APCOs with representatives of their boards. The procedure could provide that meetings will take place with a mediator.

This protocol is intended to serve as an essential structure for MOUs between districts to address air pollution transport issues. In this sense, those districts should be encouraged to expand procedures as needed so as to address issues related to the specific districts signing the MOU.

SECTION 4. COORDINATION OF PLANNING AND MODELING

(a) **General.** Because planning and modeling efforts are currently underway or nearing completion in both the SCOS and CCOS domains for the purpose of current 1-hr ozone plans, and CRPAQS for the purpose of current PM10 and future $PM_{2.5}$ plans, structures for coordination are currently in place. The

proposed approaches for a more integrated and participatory process are set forth below in two parts: (1) a long-term approach for subsequent modeling and coordination needs in support of 8-hr ozone and particulate matter planning efforts; and (2) a short-term approach under the existing structures.

(b) Long-Term Approach

(1) Transport-Coupled Modeling Coordination Working Groups. There shall be established appropriate Modeling Coordination Working Groups (MCWGs) which shall be comprised of one member representing each district which is part of a "significant" or "overwhelming" transport couple as determined by CARB; and one representative from CARB. There shall be one MCWG for the central/northern California transport couples as delineated by the CCOS domain; and one MCWG for the southern California transport couples, as delineated by the SCOS domain. Each MCWG shall elect a chairperson who must be from a district. The purpose of the MCWG is to make recommendations for:

(A) coordinating the timing and scheduling of planning/modeling efforts needed to support federal and/or state planning requirements for ozone and particulate matter,

(B) optimizing coordinated efforts for all districts affected by such modeling,

(C) establishing protocols prior to undertaking modeling efforts which would include, but not be limited to, the:

(i) establishment of modeling domain,

(ii) selection of appropriate models and submodels,

(iii) determination of validation criteria,

(iv) identification of needed inputs and timelines for inputs,

(v) criteria for selection of episodes days to be modeled; selection of appropriate year, if annual conditions are to be modeled,

(vi) determination of future year scenarios to be modeled, e.g., "what if" conditions,

(vii) process for making model/model input adjustments.

(D) determining, to the degree possible, the criteria for quantitative assessments for emissions reductions necessary to attain federal and state ozone and particulate matter standards in all transport-coupled upwind and downwind districts.

(E) new studies designed to quantify transport.

(2) Combined Coordination Meeting

At least once per year, there shall be a combined meeting of MCWGs. The purpose of this meeting is to promote reasonable consistency among the districts in modeling efforts through exchanges of technical information.

(3) Responsibilities. Each participating agency agrees to:

(A) regularly participate in scheduled meetings and/or conference calls,

(B) provide key dates and timelines with respect to its federal or state plan development,

(C) work constructively toward an acceptable model protocol by providing input to and/or commenting on model protocol development,

(D) provide model inputs with respect to local parameters, such as base and future year emissions inventories, within the time frames established in the protocol,

(4) Differences in District Capabilities. It is recognized that smaller districts have less technical capabilities with respect to modeling than the larger districts. If any eligible district so requests, and if adequate funding is available, each applicable MCWG may select an independent modeling expert to provide advice to the MCWG and/or local districts regarding protocol development and evaluation of results. If the applicable MCWG cannot agree on a specific expert, the MCWG shall recommend two or more candidates to the CAPCOA Board, which shall make a final decision. If the costs for such expert participation cannot be agreed upon among the agencies participating in the applicable MCWG, this situation shall be referred to the CAPCOA Board.

(5) Meetings. Each MCWG shall meet as frequently as necessary to meet its objectives, but not less frequently than once every six months. Meeting locations shall be determined by each MCWG. Pursuant to Section 4(b)(2), the annual combined meeting shall reasonably attempt to accommodate both northern and southern venues.

(6) Reporting. Each MCWG shall provide a summary report of activities to the CAPCOA President once every six months, or more frequently if deemed appropriate by the CAPCOA Board.

(c) Short-Term Approach; Involvement in Existing Process. Because of the extent of modeling processes underway for the current round of SIP development, districts shall recognize that the CAPCOA Board may request that its Technical Consultant participate in ongoing model working group meetings

and conference calls to maintain currency in modeling efforts, including timelines, model validation processes, input data, episodic scenarios, model adjustments, model output, and other factors as appropriate.

APPENDIX C

LANDFILL INFORMATION

TABLE C-1
Alameda County Landfill Status

Alameda County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Tri-Cities Recyling & Disposal Facility	01-AA-0008	281,491	8/1/05*	Estimated	2,346	19,271,000	1,081,500	6/1/2001
Altamont Landfill	01-AA-0009	1,346,360	1/1/2005	Estimated	11,150	58,900,000	15,843,000	6/19/2001
Vasco Road Sanitary Landfill	01-AA-0010	407,721	1/1/2015	Estimated	2,518	31,942,205	12,279,865	6/11/2001
TOTALS		2,035,572			16,014	110,113,205	29,204,365	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

*Source: County of Alameda, Environmental Health Dept., August 2004.

TABLE C-2
Contra Costa County Landfill Status

Contra Costa County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
W. Contra Costa Landfill	07-AA-0001	306,092	1/1/05*	Estimated	2,500	17,875,000	1,300,000	12/14/2001
Acme Landfill	07-AA-0002	25,389	10/31/06*	Estimated	1,500	268,700	175,000	12/12/2001
Keller Canyon Landfill Class II	07-AA-0032	715,730	12/31/2030	Estimated	3,500	75,018,280	68,279,670	6/6/2001
TOTALS		1,047,211			7,500	93,161,980	69,754,670	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

*Source: County of Contra Costa, Environmental Health Dept., August 2004.

TABLE C-3
Marin County Landfill Status

Marin County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Redwood Sanitary Landfill	21-AA-0001	370,640	1/1/2039	Estimated	2,300	19,100,000	12,900,000	6/11/2001
W. Marin Sanitary Landfill	21-AA-0002	NA	1/1/2036	Estimated	75	0	0	NA
TOTALS		370,640			2,375	19,100,000	12,900,000	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-4
Napa County Landfill Status

Napa County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Clover Flat Landfill	28-AA-0002	46,238	1/1/2021	Estimated	300	5,100,000	3,081,946	7/21/2000

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-5
San Mateo County Landfill Status

San Mateo County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Ox Mountain Sanitary Landfill	41-AA-0002	807,890	1/1/2018	Estimated	3,598	37,900,000	44,646,148	1/1/2000
Hillside Class III Disposal Site	41-AA-0008	49,167	12/31/2010	Estimated	400	2,310,000	355,937	12/31/2001
TOTALS		857,057			3,998	40,210,000	45,002,085	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-6
Santa Clara County Landfill Status

Santa Clara County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity	Remaining Capacity (cubic yards)	Remaining Capacity Date
Norcal West Systems Pacheco Pass	43-AA-0004	100,858	1/1/2104	Estimated	1,000	6,200,000	568,589	6/13/2001
City of Palo Alto Refuse Disposal	43-AM-0001	27,244	12/30/2011	Estimated	200	7,758,854	7,758,854	7/23/1999
Zanker Material Processing Faciltiy	43-AN-0001	18,210	12/31/2018	Estimated	350	540,100	540,100	9/9/1998
Newby Island Sanitary Landfill	43-AN-0003	646,188	12/31/2020	Estimated	4,000	50,800,000	14,978,546	12/31/2001
Zanker Road Class III Landfill	43-AN-0007	14,608	12/12/2003	Estimated	1,300	1,300,000	477,000	8/26/1998
Kirby Canyon Recy. & Disp.	43-AN-0008	281,463	12/31/2022	Estimated	2,600	36,400,000	57,271,507	6/11/2001
Guadalupe Sanitary Landfill	43-AN-0015	180,238	1/1/2010	Estimated	3,650	12,222,222	9,379,843	6/11/2001
TOTALS		1,268,809			13,100	115,221,176	90,974,439	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-7
Solano County Landfill Status

Solano County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Hay Road Landfill, Inc.	48-AA-0002	69,229	1/1/2070	Estimated	2,400	28,240,000	23,198,067	6/13/2001
Potrero Hills Landfill	48-AA-0075	649,461	1/1/2035	Estimated	4,330	21,500,000	13,800,000	12/14/2001
TOTALS		718,690			6,730	49,740,000	36,998,067	

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-8
Sonoma County Landfill Status

Sonoma County Class III Landfills	SWIS No.	2002 Year End Total (tons)	Closure Date	Closure Type	Permitted Throughput (tons/day)	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity Date
Central Disposal Site	49-AA-0001	490,830	1/1/2014	Estimated	2,500	19,779,250	11,243,928	2/27/2003

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

TABLE C-9
BAY AREA
Green Waste Composting Facilities Status

FACILITIES	SWIS No.	Throughput	Throughput Units	Permitted Capacity	Capacity Units	Facility Acreage
ALAMEDA-None						
CONTRA COSTA						
W. Contra Costa Sanitary Landfill	07-AA-0044	81	tons/day	11,600	cubic yards	17
MARIN						
Redwood Sanitary Landfill (Unit 2)	21-AA-0001	NA		NA		NA
NAPA						
Napa Garbage Service (Unit 1)	28-AA-0023	200	tons/day	52,000	tons/year	5
Upper Valley Disposal Service	28-AA-0026	17,500	tons/day	34,000	tons/year	20
Napa County Total		17,700	tons/day	86,000	tons/year	
SAN FRANCISCO-None						
SAN MATEO						
Tillo Products Co.	41-AA-0176	5,000	cubic yards/month	30,000	cubic yards	4
SANTA CLARA						
Palo Alto Lanfill Composting	43-AA-0014	17,000	cubic yards/year	17,000	cubic yards	7
Z-Best Composting	43-AA-0015	1,500	tons/day	500,000	cubic yards	77
South Valley Organic Composting	43-AA-0017	750	tons/day	450	tons/week	18.3
Zanker Road Landfill Unit 3	43-AN-0007	200	tons/day	0		6
Newby Island Compost Facility	43-AN-0017	470	tons/day	980	tons/day	18
Santa Clara County Total						
SOLANO						
Jepson Prairie Organics	48-AA-0083	300	tons/day	35,000	cubic yards	15
Potrero Hill Composting	48-AA-0084	850	cubic yards/day	60,000	cubic yards	18
Travis AFB Composting	48-AA-0085	24	cubic yards/day	10,000	cubic yards	3
Goodyear Road Composting	48-AA-0088	30,000	cubic yards	40,000	cubic yards	17
Solano County Total				145,000	cubic yards	
SONOMA						
Central Composting Site	49-AA-0260	300	tons/day	300	tons/day	35
Grab N' Grow	49-AA-0369	300	cubic yards/day	5,000	cubic yards	4
Sonoma County Total						
Total Bay Area						

Source: California Integrated Waste Management Board, Solid Waste Information System (SWIS), July 2004. http://www.ciwmb.ca.gov/SWIS

APPENDIX D

COMMENTS ON THE DRAFT EIR AND RESPONSES TO THE COMMENTS

APPENDIX D

FINAL ENVIRONMENTAL IMPACT REPORT

BAY AREA AIR QUALITY MANAGEMENT DISTRICT 2005 OZONE STRATEGY

RESPONSE TO COMMENTS

INTRODUCTION

This Appendix, together with the Draft Environmental Impact Report constitutes the Final Environmental Impact Report for the Bay Area Air Quality Management District's (District) 2005 Ozone Strategy.

The Draft Environmental Impact Report was circulated for a 45-day public review and comment period which started on October 7, 2005 and ended November 21, 2005. The Draft Environmental Impact Report is available at the District's offices, 939 Ellis Street, San Francisco, CA 94109, or by phone at (415) 749-5093. The Draft Environmental Impact Report can also be downloaded by accessing the District web pages at www.baaqmd.gov.

The Draft Environmental Impact Report included a detailed project description, the environmental setting for each environmental resource, and an analysis of each environmental resource on the California Environmental Quality Act (CEQA) checklist. Based on the Draft Environmental Impact Report, potentially significant adverse environmental impacts (after mitigation) were identified for a number of TCMs including aesthetics, air quality, biological resources, cultural resources, hazards, transportation and traffic, and utilities and service system. TCM impacts on hydrology and water quality, and noise were determined to be less than significant following mitigation. Most of the potentially significant impacts are associated with the construction and operation of new transit stations and facilities for rail, bus and ferries. Feasible mitigation measures were imposed where potentially significant adverse impacts were identified.

The District received five comment letters on the Draft Environmental Impact Report during the public comment period, along with an email and comments from a public meeting. Responses to all comments are presented in this Appendix. The comments are bracketed and numbered. The related responses are identified with the corresponding number and are included in the following pages. In order to adequately address the comments raised in the comment letters, new information is provided to merely clarify, amplify or make insignificant modifications to the Draft EIR. Pursuant to CEQA Guidelines §15073.5(c)(2), recirculation is not necessary since the information is provided in response to written comments on the project's effects and does not identify any new, avoidable significant effects.

COMMENT #1
Email from David Schonbrunn
October 31, 2005

Comment 1-1

Did the DEIR address the measures proposed for deletion? They are part of the No Project Alt, but not the Project.

Response 1-1

The Draft EIR addressed the potential adverse significant impacts of implementing the measures proposed for inclusion in the 2005 Ozone Strategy (also referred to as the "Project"). The Draft EIR did not address the three control measures proposed for deletion because they are not included in the proposed Project. The impact of these measures is included in the No Project Alternative because taking no action would result in the retention of these measures. We note, however, that one of the measures proposed for deletion is considered technologically infeasible at this time (D8) and the impact of deleting the other two of the three control measures (A23 & G3) is considered negligible for the following reasons:

A23 - Concrete Coating Operations. Emissions from concrete coating operations are currently less than 0.05 tons per day; therefore, potential emission reductions from this control measure are de minimis.

G3 - Seasonal Limitations on Organic Liquid Storage Tank and Wastewater Separator Cleaning and Refinery Shutdowns. This measure would require that discretionary activities such as organic liquid storage tank cleaning, wastewater separator cleaning and refinery unit shutdowns be controlled or conducted outside the summer ozone season. The 2001 Ozone Attainment Plan Reasonably Available Control Measure review also evaluated this control measures. This review found that refineries maximize production during the summer and schedule these activities at other times, so few emission reductions are likely during summer months. Also, amendments to Regulation 8, Rule 10 - Process Vessel Depressurization adopted in January 2004 achieve part of the emission reduction that would be produced by this measure. Amendments to Regulation 8, Rule 8 - Wastewater Separators adopted in September 2004 achieve an addition portion of the emission reduction. Finally, more stringent organic liquid storage tank cleaning requirements, which are currently being studied as part of 2001 Ozone Attainment Plan further study measure FS-10, would achieve yet another portion of the emission reductions. Therefore, the emission reductions under G3 have been achieved or will be achieved through other rules; moreover, these rules will achieve emission reductions on a continual basis, not just seasonally. Any remaining emission reductions that could be achieved through seasonal prohibitions are de minimis.

D8 - Improved Residential Water Heater Rule. Residential water heaters are subject to the requirements of District Regulation 9, Rule 6 - Nitrogen Oxide Emissions from Natural Gas Fired Water Heaters. The control measure recommended lower NOx limits found in the comparable SCAQMD rule. In 1999, amendments to SCAQMD Rule 1121 established a 20 nanogram NOx/joule of heat output standard effective in 2002 and a 10 nanogram NOx/joule of heat out put standard effective in 2005. The standards were considered to be technology forcing standards. Manufacturers are not currently able to meet the 20 nanogram NOx/joule of heat output at this time. The SCAQMD has amended the effective date for Rule 1121 until 2006 thru 2008. Therefore, this control measure is infeasible at this time.

COMMUNITIES FOR A
BETTER
ENVIRONMENT

November 21, 2005

VIA EMAIL
Suzanne Bourguignon, Principal Environmental Planner
Bay Area Air Quality Management District
939 Ellis Street, San Francisco, CA 94109
Email: sbourguignon@baaqmd.gov

Re: Communities for a Better Environment Comments on Draft EIR for Bay Area 2005 Ozone Strategy Plan

Communities for a Better Environment (CBE) submits the following comments on the Draft Environmental Impact Report for the Bay Area Air Quality Management District's (District) 2005 Bay Area Ozone Plan ("Ozone Plan DEIR"). We incorporate by reference the comments that CBE has previously submitted related to the 2005 Ozone Plan and Transportation Solutions Defense and Education Fund's DEIR comments. 2-1

The Ozone Plan DEIR generally provides clear summaries of the Draft 2005 Bay Area Ozone Plan's major elements. One shortcoming in the project description, which has implications that will be further addressed related the failure to consider a reasonable range of project alternatives, is that the DEIR fails to provide details regarding "further study measures." Another serious deficiency, which is common to the Draft Ozone Plan itself, is that the DEIR's analytical approach largely treats ozone impacts in isolation from broader air quality regulations and thereby fails to adequately address the full range of air quality impacts.

Our comments focus on the following central deficiencies in the Ozone Plan DEIR: 2-2

- inconsistent and inadequate definitions of baseline conditions;
- piecemealing with a narrow focus on ozone without adequate consideration of interrelationships with broader air quality impacts;
- incomplete analysis of cumulative impacts;
- failure to apply precautionary principle protective of public health to compensate for analytical deficiencies from piecemealing and inadequate cumulative analysis;
- failure to provide and analyze a reasonable range of project alternatives.

Inconsistent Baseline Conditions Not Defined by Substantial Evidence

CEQA Guidelines Section 15125(a) establishes that "the baseline physical conditions … as they exist at the time the notice of preparation is published …determine whether an 2-3

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impact is significant." The lead agency generally has discretion in determining what constitutes environmental baseline conditions, so long as it is consistently supported by substantial evidence. Fat v. County of Sacramento (2002) 97 Cal.App.4th 1270, 1278. Unless baseline conditions are consistently and substantially defined, it is impossible to evaluate environmental impacts because there is nothing against which to compare projected conditions which result from a plan or project. Save Our Peninsula Committee v. Monterey County Board of Supervisors (2001) 87 Cal.App.4th 99, 119.

The Ozone Plan DEIR does not consistently define what constitutes baseline conditions. The text indicates that the baseline is 2000 based on the 2000 Clean Air Plan (CAP), but data is presented which variously compares conditions to 2000, 2002 or 2003, or, in the case of toxic air emissions in Table 3.4-5, 2002 data is provided without any comparisons to past conditions and with no identification of projected future conditions. In general, the DEIR assumes that future emissions of ozone precursors – reactive organic gases and nitrogen oxides – will be considerably lower than the past inventory. This conclusion seems to be based on declines seen starting in 2001. As CBE has explained in earlier comments the District uses changes rooted in the serious economic downturn seen in the Bay Area and favorable meteorological conditions to justify less aggressive and effective regulations. The DEIR needs to reassess its estimates of future emissions on more realistic projections which are not dependent upon distortions inherent in data based on unrepresentative conditions.

2-3 concluded

Both the stationary source controls and Transportation Control Measures (TCMs) presented in the Ozone Plan DEIR largely reiterate control measures which have either been previously implemented or are already subject to rulemaking processes. In some cases, particularly with respect to a number of TCMs, it is difficult to understand which measures have already been implemented or what substantive changes to existing controls are being proposed and analyzed. This confusion further compromises the Ozone Plan DEIR's already inconsistent definition of baseline conditions. Despite the ongoing character of most of the control measures, very little objective evaluation of the past effectiveness and prospects for future effectiveness is provided to support claimed projections of future reductions in emissions. The quality of the limited assessments of control measures provided is severely compromised by the failure to thoroughly address air quality impacts beyond consideration of effects on ozone precursors.
The Ozone Plan DEIR does not provide substantial evidence which consistently documents what constitutes baseline conditions. Its projections about what the Ozone Plan will accomplish thus are not credible because neither the starting point, i.e., baseline conditions, nor the past efficacy of its control measures have been adequately demonstrated. Therefore the Ozone Plan DEIR is deficient due to its failure to establish consistent baseline conditions against which future impacts can be evaluated.

2-4

Limited Efficacy of Proposed Transportation Control Measures and Failure to Incorporate More Effective Measures

Transportation Control Measures (TCMs) focus on indirect sources of air pollution, primarily motor vehicles, instead of stationary sources. Indirect sources are major generators of ozone precursors but also generate other pollutants that have disproportionately adverse effects on environmental justice communities which also suffer similarly disproportionate effects from stationary sources. The Ozone Plan DEIR primarily relies upon TCM approaches from its 1991 Clean Air Plan (CAP) and subsequent CAPs to presume a past and future effectiveness which is largely undemonstrated.

The TCMs carried forward in the Ozone Plan continue the present heavy focus on grant funding of employers and other voluntary transportation demand management (TDM) programs. The only specific information provided regarding the past effectiveness of these programs shows a 70% decline in the effectiveness of emission reductions from the Carl Moyer Program since FY 2000-01 (Ozone Strategy, Table 8, p. 37). In practice, there have been ongoing problems with many of BAAQMD's grant programs associated with funds being allocated but not fully utilized or lack of private commitments to establish and maintain effective programs. The DEIR discloses neither these ongoing problems with programs the Ozone Plan proposes to carry forward nor specific enhancements to address these problems, including incorporation of additional, more effective TCMs into the Ozone Plan. 2-5

The TCMs discussed in the Ozone Plan DEIR continue to emphasize various expensive capital projects, particularly for rail projects, without addressing the effects on competing transit services or providing thorough documentation of relative effectiveness with respect to overall air quality amelioration. Within TCMs # 4, 5 and 6, for example, no analysis is provided which distinguishes the relative effectiveness of different rail services.

The Ozone Plan DEIR does not even acknowledge recent operational funding shortfalls and the long-term, adverse picture regarding operations funding for transit, particularly for bus transit operators, and the associated adverse effects on air quality. The lack of attention to maintenance and upgrading of bus services in the TCM controls is striking because the Bay Area 2005 Ozone Strategy document itself documents that TCM #3 dwarfs the magnitude of NO_x reductions achieved by other TCMs, achieves the highest level of effective ROG reductions of any of the TCMs, and also has a "good" cost effectiveness rating. The logical implication from the limited evidence presented is that the DEIR and the Ozone Plan itself need to objectively assess the actual effectiveness of the various TCMs, particularly in relation to TCM #3. In the absence of a critical evaluation of relative effectiveness, the generalized implication that some other TCMs should be carried forward is likely misplaced and a reorientation in funding priorities would be more likely to improve air quality than the amorphous approach presented in the DEIR. 2-6

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Inconsistent Baseline Plus Uncertain Efficacy of Control Measures Equal Deficient DEIR

The DEIR's failure to clearly define or analyze either what constitutes baseline conditions or the actual effectiveness of its advocated control measures vitiates an underlying purpose of CEQA which is to objectively disclose and analyze environmental impacts. Without an accurate baseline, it is impossible to realistically evaluate the likelihood of improved conditions in the future. Without thorough and objective evaluations of the past and likely future effectiveness of control measures, the feasibility of the outcomes claimed in the DEIR is speculative. The DEIR fails to define consistent or accurate baseline conditions, relies on control measures with largely undocumented effectiveness, and presumes future ameliorations which are fraught with uncertainties. A lead agency cannot rely upon either inadequately defined baseline conditions or mitigation measures of uncertain efficacy or feasibility. Kings County Farm Bureau v. City of Hanford (1990) 221 Cal. App. 3d 692, 718, 729. Thus, the DEIR fails to articulate and adequately address the effects of delayed compliance with the state ozone standard and the significant impacts to human health and economic productivity from unhealthful ambient air quality that would likely occur in the interim between an ill-defined baseline and a murky future. 2-7

Ozone Piecemealed From Other Air Quality Impacts

The DEIR and the underlying Ozone Plan segment evaluation of the state program for ozone compliance without addressing interrelationships identified by the California Air Resources Board between toxic air emissions, localized effects from diesel emissions, and particulate attainment strategies. Broad public health effects due to interactions between pollutants are not addressed nor are comprehensive risk assessments provided. The following examples highlight how the DEIR's focus on ozone demonstrates an incongruous and ineffective approach to air quality regulation: 2-8

- Figure 3.4-3 shows that VOC Emissions from combustion stationary sources and miscellaneous other sources rose over the 2000-2003 period;
- Table 3.4-4 shows a lack of progress and even increases in ROG and NO_x emissions in the future at many refinery and chemical facilities;
- Table 3.4-14 shows steady future increases in PM_{10} emissions; and
- 2002 data is presented for toxic air emissions in Table 3.4-5 with no identification of projected future conditions.

But the District is required to analyze the environmental impacts of this Plan in addition to the air impacts. See ARB BACT Workbook, Section B)

Moreover, the lack of attention to Particulate Matter (PM) emissions is especially egregious because PM aggravates respiratory illnesses, can cause asthma attacks, and may cause early death in people with heart and lung disease. PM is particularly dangerous for people living in environmental justice communities because they are hit 2-9

with numerous sources. The DEIR should fully analyze all aspects of PM impacts as well as the ozone impacts when adopting control measures. For example, the DEIR should consider together the emissions from cooling towers, NO_x reductions from boilers, stationary internal combustion engines, alternative diesel fuels, all of which generate PM as well as ozone – PM precursors in the case of NO_x reductions from boilers. CEQA requires that the full range of environmental impacts be analyzed. Failure to analyze such sources for potential measures to reduce smog and PM may lead to a biased control analysis as well as a deficient CEQA analysis. Modeling also should consider possible PM reductions because this would most comprehensively address the impacts of ozone and is the most cost-effective approach since the Air District is charged with regulating both PM and ozone.

2-9 concluded

CEQA mandates that all environmental impacts associated with a project be analyzed and can "not become submerged by chopping a large project into many little ones---each with a minimal potential impact on the environment." Bozung v. Local Agency Form. Comm'n of Ventura County (1975) 13 Cal. 3d 263, 283-284. The Ozone Plan DEIR segments its analysis and fails to comprehensively address PM, diesel, toxic air, and broader air quality emissions which are closely related but different in effects from the impacts of ozone precursors. The DEIR does not analyze the Ozone Plan and its effects in their entirety and has thereby violated CEQA by illegally piecemealing the project by masking the full, interrelated effects of the program of controls in the Ozone Plan. See, Citizens Association for Sensible Development of Bishop Area v. County of Inyo (1985) 172 Cal. App. 3d 151.

2-10

Cumulative Impacts

The Ozone Plan DEIR dutifully presents section headers for cumulative air quality impacts for both criteria and non-criteria pollutants. The discussion of criteria pollutants indicates that ROG and NOx emissions are expected to decline but that PM10 emissions would increase by 16 percent by 2020. The DEIR concludes that these "secondary impacts" would be outweighed by other reductions in emissions related to ozone. The DEIR fails to substantively analyze potential ROG and diesel impacts in connection with non-criteria pollutants. The DEIR briefly discusses the California Air Resources Board Risk Reduction Plan (RRP) and appears to treat the RRP as an all-purpose panacea to any and all impacts from non-criteria pollutants.

2-11

The Ozone Plan DEIR's cursory approach to cumulative air quality impacts mirrors its piecemealing approach to overall air quality impacts. CEQA requires that the lead agency must assess the environmental impacts of all reasonably foreseeable aspects of a project. Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif. (1988) 47 Cal. 3d 376, 396-397. The Ozone Plan DEIR impermissibly addresses ozone impacts without linkages to broader health effects related to PM, diesel, toxic air, and broader air quality impacts. The BAAQMD is legally mandated to comprehensively address all aspects of adverse air quality effects in an integrated fashion. Instead, the Ozone Plan DEIR puts control measures for ozone precursors in one box and other threats to public

health in another box. CEQA requires that environmental documents not limit assessments to consideration of individually limited effects but must also evaluate effects which may be cumulatively considerable in the context of the combined cumulative impacts of a project or plan. CEQA Guidelines, Section 15030; San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus (1994) 27 Cal. App. 4th 713. The Ozone Plan DEIR's myopic focus on regional ozone impacts does not satisfy CEQA because neither a comprehensive set of controls are included nor is a thorough analysis that ensures that adverse localized air quality effects and overall cumulative air quality impacts performed.

2-11 concluded

The DEIR Fails to Mitigate Potentially Significant Environmental Impacts

The piecemealing and failure to address cumulative impacts in the DEIR is further illustrated in the by the lopsided analysis in determining whether a control measure is appropriate. The DEIR must be revised to apply a precautionary approach in evaluating controls, one that recognizes that low income communities and communities of color face higher exposures to air pollution because of proximity to stationary & mobile sources, increased sensitivity to those sources due to constant high exposure, and because many pollutants concentrate locally. The Ozone Plan DEIR states that it considered 390 control measures based on the following factors: (1) Technological feasibility of proposed controls; (2) Emission inventory of the source category and total likely emission reductions from proposed controls; (3) Cost-effectiveness in dollars per ton of emissions reduced; (4) Enforceability, including whether emission reductions are real, quantifiable, permanent, enforceable, and surplus; (5) Rate (and timing) of emissions reductions; (6) Public acceptability, including interests and concerns of community members; (7) Pollutant reduced (volatile organic compounds, nitrogen oxides or both); (8) Any potential adverse environmental impacts; and (9) Socioeconomic impacts.

2-12

The factors outlined in the Ozone Plan DEIR weigh cost and the economic cost to industry and focus solely on the regional picture. These factors as applied do not consider the costs in terms of adverse health effects from localized and disproportionate concentrations of pollutants in environmental justice communities. The Ozone Plan's disproportionate consideration of economic costs to industry in these factors has no real countervailing consideration of the benefits of any proposed measure to the most adversely affected communities who suffer severe health impacts from current operations and perpetuation of existing control strategies. Any balanced measure of economic costs must also consider the economic costs to these communities and related government services associated with high levels of cancer, asthma, and impaired productivity.

These deficiencies make it imperative that a precautionary approach most protective of the public health of environmental justice communities be included in the Ozone Plan and its DEIR to ensure that this dynamic and these facts are taken into account when evaluating a control measure and its effects. The Ozone Plan DEIR claims that the factors BAAQMD considered include "concerns of community members" but that is only relevant to the extent that the community members are fully informed and actually

2-13

involved in the planning process. The Ozone Plan DEIR presents an incomplete and biased analysis that does not address the negative effects or potential benefits associated with additional control measures. These have been precluded from analysis in the DEIR by disproportionately weighing economic costs to industry without application of a precautionary principle cognizant of the full range of air quality impacts and the disproportionate concentration of the most adverse impacts in environmental justice communities.

The California Clean Air Act requires each area to attain compliance with air quality standards by the earliest practical date. Cal. Health & Safety Code Section 43018(a) Since 1991, BAAQMD has developed a series of plans which promise to achieve attainment, but the region continues to routinely violate the California ambient air quality standard for ozone. The Ozone Plan DEIR continues this pattern by providing no projected future attainment date or even a realistic estimate of the emissions reductions necessary to achieve attainment. BAAQMD's past and proposed control measures aspire and promise but have not demonstrated "earliest practical" delivery of results. The time is long past for the affected communities which CBE represents to have economic costs to industry used to dismiss serious consideration of a precautionary approach protective of the health of vulnerable communities.

2-13 concluded

Deficient Project Alternatives

The definition of project alternatives in the Ozone Plan DEIR is deficient because it fails to go beyond a vaguely defined alternative that is dismissed without being appropriately defined or analyzed.

CEQA requires that an EIR describe "a range of reasonable alternatives … which could feasibly attain the basic objectives of the project and evaluate the comparative merits of the alternatives." CEQA Guidelines, Section 15126.6; Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal. 3d 553. Feasible alternatives capable of either eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if such alternatives would be more costly or to some degree would impede the project's objectives, must be included in an EIR. CEQA Guidelines, Section 15126.6 (b) California Public Resources Code Section 21002 further declares that "public agencies should not approve projects as proposed if there are feasible alternatives or mitigation measures available which would substantially lessen the significant environmental effects of such projects." See also, CEQA Guidelines, Sections 15002 (a)(3) and 15021(a)(2); Sierra Club v. Gilroy City Council (1990) 222 Cal. App. 3d 692, 711, 730-731; Citizens for Quality Growth v. City of Mount Shasta (1988) 198 Cal. App. 433, 440-441. An inadequate discussion of alternatives constitutes an abuse of discretion. Laurel Heights Improvement Assn. v. Regents of Univ. of Calif. (1988) 47 Cal. 3d 376, 404-406.

2-14

The Ozone Plan DEIR neither presents a reasonable range of alternatives. The DEIR does not even acknowledge the specific Further Study Measures identified in the Bay

Area 2005 Ozone Strategy document. These measures include the following which could substantially reduce adverse emissions at refineries and chemical facilities:

- emissions from cooling towers
- refinery wastewater treatment systems
- vacuum trucks
- valves and flanges
- wastewater from coke cutting operations
- NO_x reductions from refinery boilers
- stationary internal combustion engines
- encourage alternative diesel fuels

If the precautionary health principle protective of the public health of environmental justice communities had been applied, these measures would have been included as control measures included in the Ozone Plan and not deferred for consideration at some uncertain future time. Absent inclusion in the project, these measures for stationary sources must be included in the definition of at least one project alternative in order to satisfy CEQA's requirement for consideration of a reasonable range of alternatives. In addition, the Ozone Plan DEIR needs to be modified to incorporate into one alternative analysis of a more comprehensively defined program of TCM measures.

2-14
concluded

Conclusion

CBE requests the District to address the deficiencies discussed in this letter.

Very truly yours,

Adrienne Bloch
CBE Staff Attorney

COMMENT # 2

Adrienne Bloch
Communities for a Better Environment
November 21, 2005

Response 2-1

The District staff has received and considered the comments submitted by Communities for a Better Environment (CBE) and Transportation Solutions Defense and Education Fund on the Draft EIR for the 2005 Ozone Strategy. Responses to those comments are set forth in this Appendix.

Response 2-2

This comment provides a general overview of the comment letter provided by CBE. More detailed comments are provided in the subsequent comments. The detailed responses to these issues are provided in Responses 2-3 through 2-14.

Response 2-3

The commenter fundamentally misunderstands the purpose of the environmental review required under CEQA. Many of the issues raised in comments submitted on the Draft EIR, including this one, ask whether the 2005 Ozone Strategy goes far enough to improve air quality. These are important issues; but they are pertinent to the review of the plan itself, not the EIR. Under CEQA our task is to consider whether implementation of the proposed project – in this case, the control measures included in the 2005 Ozone Strategy – will result in one or more significant adverse environmental impacts when compared to the baseline, and whether and how such impacts can be mitigated or avoided. This inquiry is very different from the question whether the project could improve upon the baseline or whether such improvements have been properly identified. In this appendix to the EIR, we focus our responses on the issues relevant to the environmental review under CEQA. Issues regarding the completeness of the plan and whether it could do more to improve air quality or whether those improvements have been properly quantified are addressed in the 2005 Ozone Strategy and appendix.

As the commenter notes, the CEQA Guidelines specify that an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective. The baseline used in the Draft EIR meets these specifications.

To characterize the baseline, the District has consistently used the most recent air quality and emissions inventory data available. The Draft EIR uses ambient air quality data for 2004 with 2002 data for toxic air contaminants.[1] Baseline emission inventories for NOx

[1] The 2002 data for toxic air contaminants was the most recent data available at the time the Draft EIR was released.

and VOCs are provided in the Ozone Strategy for the years 2000, 2003, and 2005, which is reported in the EIR (see Table 3.4-4). In most cases, the 2003 inventory has been used for comparison with air quality project impacts to determine potentially significant adverse air quality impacts (see EIR section 3.4.3). No additional data have been provided by the commenter that would change this conclusion.

Note that the air quality environmental setting provides historical air quality information and data to provide an overall perspective of the air quality issues in the District. For example, a 10 year air quality summary is provided in Table 3.4-3, and a 20 year summary of ozone is provided in Figure 3.4-1. The trend data are provided so that the reader has a concept of the larger, historical air quality conditions in the Bay Area.

The commenter contends that deficiencies in characterizing the baseline results in less aggressive and effective regulations. As explained above, this is not a CEQA issue, and it is not true. The 2005 Ozone Strategy includes all feasible measures and an expeditious adoption schedule. Nothing in the characterization of the baseline for purposes of completing the CEQA analysis of the potential impacts of implementing the plan has affected that process.

Response 2-4

As explained in the response to Comment 2-3, this comment raises issues related to the adequacy of the Ozone Strategy itself and not the EIR. The baseline has been properly established and substantiated, and has provided an adequate basis for determining whether implementation of the 2005 Ozone Strategy will result in any significant adverse environmental impacts.

While not necessary to address a CEQA concern, note that District staff evaluated the potential effectiveness of all control measures based on a variety of factors, including:

- Technological feasibility of the proposed controls;
- Emission inventory of the source category and total likely emission reductions from the proposed control;
- Cost-effectiveness in dollars per ton of emissions reduced;
- Public acceptability, including interests and concerns of community members;
- Whether the emission reductions are real, quantifiable, permanent, enforceable, and surplus;
- Whether reduction is of volatile organic compounds or nitrogen oxides or both;
- Rate of emission reduction;
- Any potential adverse environmental impacts; and
- Socioeconomic impacts.

More importantly, in the context of the Draft EIR, and despite the commenter's suggestion to the contrary, the District did consider the potential impacts of the plan's effects on pollutants other than ozone precursors.

A summary of the description and evaluation of these control measures is included in Appendix C&D of the 2005 Ozone Strategy. Table 6 of the 2005 Ozone Strategy shows the rules and control measures that have been adopted since 1991. Pages 38 through 42 of the 2005 Ozone Strategy describes the TCMs that have been implemented during 2001-2003. The air quality impacts of the plan are detailed in Chapter 3.4 of the EIR.

See Response 2-3 with respect to baseline.

Response 2-5

Again this comment concerns primarily the 2005 Ozone Strategy and not the Draft EIR. A summary of the evaluation of the TCMs is included as Appendix D of the 2005 Ozone Strategy. Under CEQA an EIR must include an evaluation of the potential adverse impacts of a proposed project (in this case the control measures in the 2005 Ozone Strategy), mitigate potentially significant impacts, and evaluate alternatives to avoid potentially significant adverse impacts. There is no requirement in the CEQA statutes and guidelines that require that an EIR evaluate the effectiveness of the control measures, although that was a component of the 2005 Ozone Strategy.

Note that the 2005 Ozone Strategy indicates that most projects in Phase 1 of the TCMs are either currently programmed or funding is otherwise expected to be available for full implementation. Some Phase 2 projects have substantial funding identified, while others are dependent on future funding sources (see page 59 of the 2005 Ozone Strategy).

Again we note that the Draft EIR did consider the impacts of all control measures, including TCMs, and addressed the potential adverse impacts of any air pollutant effected by the plan.

Response 2-6

This comment concerns the 2005 Ozone Strategy and not the Draft EIR. A summary of the description and evaluation of the TCMs is included as Appendix D of the 2005 Ozone Strategy and is not part of the EIR.

The regulatory agenda for adopting the stationary source control measures and TCMs is identified in Table 10 and Table 13, respectively, of the 2005 Ozone Strategy. Phase 1 of TCM #3 is being implemented between 2004 and 2006. Phase 2 will occur after 2006.

Response 2-7

This comment concerns the 2005 Ozone Strategy and not the Draft EIR. See Response 2-3 with respect to baseline. See Responses 2-4 and 2-5 regarding the analysis of the effectiveness of the control measures.

The commenter's suggestion that delayed compliance has resulted in significant impacts on air quality and public health is not based in fact. As shown in the EIR (see Table 3.4-

3), the air quality in the Bay Area was in compliance with most ambient air quality standards in 2004, except for the 1-hour state ozone standard (exceeded on 7 days) and the 24-hour federal PM2.5 standard (exceeded on 1 day).

Response 2-8

The commenter claims that the Draft EIR and 2005 Ozone Strategy do not address the interrelationships between toxic air emissions, localized effects from diesel emissions and particulate matter attainment strategies. We disagree. The EIR evaluated the air quality impacts of the control measures included in the 2005 Ozone Strategy on all pollutants. For example, the EIR evaluated the secondary emissions due to change in the use of lower VOC coatings, which includes analysis of the potential increase in toxic air contaminants. The EIR evaluated the secondary air quality impacts from additional control of stationary sources, which includes an analysis of PM10 emissions, ammonia emissions and CO emissions, as well as NOx and VOC emissions. The EIR evaluated the secondary air quality impacts from construction activities for all criteria pollutants. The EIR evaluated the secondary air quality impacts of VOC and NOx emissions associated with increased electrical demand. The EIR evaluated the emissions from mobile sources, including CO, NOx, VOC and PM10 emissions. Further, the EIR evaluated the impacts of the 2005 Ozone Strategy on toxic air contaminants, including diesel emissions.

The commenter misunderstands the purpose of the various tables and figures referenced in this comment. Figures 3.4-3 and 3.4-4 were intended to show that VOC and NOx emissions from mobile sources are the major source of VOC and NOx emissions in the Bay Area and account for over 50 percent of the total VOC emissions and about 80 percent of the NOx emissions in 2003. An overall reduction in emissions from mobile sources has lead to a decrease in total emissions as illustrated in Figure 3.4-2. Any effective ozone control strategy will need to focus on reductions in emissions in mobile sources in order to attain the ambient air quality standards.

As noted in this comment, the overall PM10 emission inventory is expected to increase between 2005 and 2020. The evaluation in the EIR of the secondary PM10 emissions associated with the implementation of the proposed control measures in the 2005 Ozone Strategy indicated that the increases were expected to be minor. In fact, the overall increase in PM10 emissions projected between 2005 and 2020 is largely associated with an increase in population and other activities, not implementation of the 2005 Ozone Strategy. Additional control measures to be implemented by CARB are expected to provide additional PM10, VOC, and NOx emission reductions in the Air District, primarily associated with reduced emissions from mobile sources and consumer products.

The EIR indicates that the 2005 Ozone Strategy is expected to result in an overall decrease in vehicle miles traveled and air emissions on a regional basis. However, significant localized air quality impacts associated with diesel exhaust could occur due to certain TCMs that would concentrate traffic in specific areas. Impacts associated with toxic air contaminants as a result of implementing these TCMs were considered to be

potentially significant. Sufficient data to estimate the projected future concentrations are not available and will depend on many different factors, e.g, location of transportation centers, projected capacities, etc. Therefore, the specific concentrations of toxic air contaminants are considered to be speculative, and are not amenable to further analysis at this time. These impacts will be fully considered when the individual projects that may result in these emissions increases are proposed. Nonetheless, for purposes of this project, the potential toxic air contaminant impacts were considered to be significant and to require mitigation.

Response 2-9

The District agrees that PM10 is a pollutant of significant concern.[2] Thus, while the 2005 Ozone Strategy is intended to reduce ozone precursor emissions and does not specifically address PM, many of the proposed control measures are expected have the additional benefit of helping to reduced overall PM and diesel PM emissions. CEQA does not require the District to consider the impacts of ozone and PM10 emissions from sources currently operating within the District, unless the 2005 Ozone Strategy can be expected to result in an increase in emissions of ozone precursors or PM10 or its precursors from those sources. See Response 2-8 regarding PM10 impacts of the proposed 2005 Ozone Strategy.

Several stationary source control measures will reduce PM emissions. The flare control measure (SS-6 Flares, adopted as Regulation 12, Rule 12 on July 20, 2005) will result in decreased PM emissions from a reduction in incineration. The control measures aimed at combustion processes (boilers, large water heaters and stationary gas turbines) primarily reduce NOx emissions. NOx emissions from stationary (and vehicular) source fuel combustion are precursors to nitrates, which comprise a significant portion of ambient PM. Therefore, these NOx measures will also lead to a reduction in PM.

All of the mobile source measures will help reduce PM emissions, with the diesel equipment idling ordinance measure (MS-1) and the low-emission vehicle incentives measure (MS-3) helping to reduce diesel PM in particular. All of the transportation control measures, by reducing vehicle trips and vehicle miles traveled will have the

[2] For example, the District recently approved a schedule for adoption of particulate matter (PM) control measures under Senate Bill 656 (stats. 2003, c. 738). This legislation, sponsored by Senator Byron Sher, requires ARB, in consultation with local air districts, to develop and adopt a list of the most readily available, feasible, and cost-effective control measures that could be employed by ARB and the air districts to reduce PM10 and PM2.5. The goal of SB 656 is to ensure progress toward attainment of State and federal PM10 and PM2.5 standards. The list of control measures is to be based on rules, regulations, and programs existing in California as of January 1, 2004 to reduce emissions from new, modified, or existing stationary, area, and mobile sources. CARB approved the list of control measures in November 2004. The bill also requires air districts to review the CARB list and develop implementation schedules for feasible control measures appropriate for the respective air basins based on the nature and severity of local PM conditions. The implementation schedules are to be developed by prioritizing adoption and implementation based on the effect each control measure will have on public health, air quality, emission reductions, as well as each control measure's feasibility, cost-effectiveness, and appropriateness for the respective region. The District has evaluated the CARB list of control measures, analyzed Bay Area PM sources, and approved an implementation schedule in November 2005.

additional benefit of reducing PM emissions from fossil fuel combustion and re-entrained road dust.

Response 2-10

The District has not improperly segmented a large project to avoid consideration of environmental impacts. To the contrary, we have looked at the impacts of individual control measures because that is the only way to accurately assess the overall impact of implementing the 2005 Ozone Strategy. In no sense has the District piecemealed the analysis of potential impacts to avoid consideration of mitigation measures and other alternatives. In fact, while the plan as a whole is expected to have an overall beneficial effect on air quality, the District has faithfully met its obligation to mitigate the environmental impacts identified in the EIR where feasible.

See Responses 2-8 and 2-9 with respect to potential PM control measures. As discussed in Response 2-8, the EIR evaluated the potential secondary air quality impacts of the proposed 2005 Ozone Strategy on all pollutants. The cumulative impact of the overall air pollution control strategy in the Bay Area are included in Section 3.4.5. No piecemealing of the proposed project has occurred. The EIR recognizes that there are potentially significant impacts associated with the 2005 Ozone Plan itself. The cumulative impacts of the various air pollution control measures and strategy is expected to be an overall reduction in emissions, over what would be expected without the control measures and strategies in place.

Response 2-11

The comment that the Draft EIR fails to analyze potential ROG and diesel impacts in connection with toxic air contaminants is incorrect. The potential VOC emission impacts related to toxic air contaminants for the 2005 Ozone Strategy is found in subsection 3.4.3.2 Non-Criteria Pollutants. The cumulative impact discussion associated with toxic air contaminants is located in subsection 3.4.5.2.

CARB's risk reduction plan is included as a cumulative project impact discussion and is not referred to as an "all purpose panacea" to impacts from toxic air contaminants. However, the RRP is expected to result in a reduction in diesel particulate emissions and associated cancer risk of 85 percent by 2010 and 95 percent by 2020. Therefore, the RRP will have a beneficial effect on reducing the localized impacts of toxic air contaminants. Additional clarification has been provided in subsection 3.4.5.2 to indicate that the reduction in particulate emissions and the related decrease in cancer risk is expected to provide beneficial health impacts.

The Draft EIR analyzed the impacts of all air pollutants on air quality, including air quality standards that have been established to protect public health. The EIR considers the ozone control measures that are part of the 2005 Ozone Strategy as the proposed project. The impact of other air pollution control strategies (e.g. CARB regulations) is part of the cumulative analysis in subsection 3.4.5 of the EIR, and not part of the

proposed project. As required under CEQA Guidelines §15130 (b), the discussion of cumulative impacts reflects the severity of the impacts and their likelihood of occurrence. The guidelines indicate that the discussion need not provide the same level of detail as is provided for the effects attributable to the project alone. Therefore, the analysis of the ozone control measures impacts in the EIR correctly places greater emphasis on the impacts of the proposed project over the cumulative impact.

The mere existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable. (CEQA Guidelines §15064(h)(4).) As noted above, the cumulative impacts of the various air pollution control strategies have been evaluated in the EIR. Further, the commenter claims that available control strategies have been excluded from the analysis but does not provide examples.

See also Responses 2-8, 2-9, and 2-10.

Response 2-12

The commenter argues that the Draft EIR must be revised to apply a precautionary approach in evaluating controls. In fact, the document does exactly this by complying with the requirement under CEQA to identify all significant adverse environmental impacts that may result from implementation of the 2005 Ozone Strategy.

The commenter suggests that additional controls are necessary to further reduce levels of ozone, particularly in communities that are disproportionately impacted by pollutants. Although not relevant to the environmental analysis required under CEQA, we note that ozone is a regional pollutant and that reductions in ozone precursor emissions within the air basin will affect all communities within the District (and downwind areas as well), including the most heavily impacted areas such as Livermore at the eastern edge of the District. In this regard it is also useful to recall that the 2005 Ozone Strategy includes all feasible measures and an expeditious adoption schedule. This is specifically authorized by state law. Moreover, any control measure included in the plan must be able to meet certain requirements including feasibility and cost-effectiveness; this is required by state law. See Response 2-4 for a discussion of how control measures were developed

The proposed project's potential impacts, considering all air pollutants and all receptors, are addressed in the analysis of potential adverse impacts in Chapter 3. The overall impact of the 2005 Ozone Strategy and other air pollution control strategies is expected to be an overall reduction in air emissions to all communities in the Bay Area, providing the related air quality and public health benefits.

The remainder of this comment concerns the 2005 Ozone Strategy and not the Draft EIR.

Response 2-13

The District conducted an extensive public participation effort for the 2005 Ozone Strategy that involved multiple opportunities for public comment. The public involvement process in included in Appendix A of the 2005 Ozone Strategy.

The Bay Area violated the state ozone standard on 7 days in 2004, the most recent year with monitoring data available, which is down from 1996 when state ozone standard was exceed on 34 days (see EIR Table 3.4-3). As noted in Response 2-4, the DISTRICT staff evaluated the potential effectiveness of each control measures based on a variety of factors, only one of which was cost.

The California Clean Air Act requires regions that do not meet the State one-hour ozone standard to prepare plans for attaining the standard, and to update these plans every three years. The measures constitute a roadmap for how the Bay Area proposes to comply with the State one-hour air quality standard for ozone as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. The control strategy includes stationary source measures, mobile sources measures and transportation control measures. These plans must include estimates of current and future emissions of the pollutants that form ozone, and a control strategy, including "all feasible measures", to reduce these emissions. The plans must also propose measures to reduce transport of air pollutants to downwind regions.

The CCAA contemplates the use of models to assess improvements in air quality as part of the ongoing effort to attain and maintain the state ambient air quality standards as part of the triennial plan updates. However, as the District is currently pursuing an "all feasible measures" planning effort – as are all other districts that have planning obligations under the CCAA – modeling to demonstrate the effect of emissions reductions and the estimated attainment date are not necessary or required as part of the 2005 Ozone Strategy. See also Response 2-12.

Response 2-14

The limitation in developing alternatives to the proposed project are addressed in the EIR (see subsection 4.2 - Alternatives Rejected as Infeasible). The only alternative under the CCAA available to the District as a legal and practical matter is to adopt all feasible measures on an expeditious schedule. To satisfy the all feasible measures requirement, the District investigated a wide range of potential ideas from many sources. The steps the District took to identify all feasible control measures are outlined in Chapter 2, Sections 2.3, 2.3.1, 2.3.3, 2.3.5, and 2.3.6. In total, District staff considered 390 control measure suggestions primarily from stationary and mobile sources. Of the 390 control measure suggestions considered by District staff the potential control measures were distilled down to the measures identified in the 2005 Ozone Strategy that were determined to be feasible per the requirements of California Health and Safety Code §40922(b). The factors taken into consideration when determining which control measures are feasible include cost effectiveness, technological feasibility, total emission reduction potential, the rate of reduction, public acceptability, and enforcement (CCR §40922 (a-b)).

The CCAA requires that the District's 2005 Ozone Strategy include implementation of all feasible control measures and installation of BARCT on all existing stationary sources of ozone precursor emissions as expeditiously as practicable (title 17, California Code of Regulations (13 CCR), §70600(b)(1)). In addition, the District must include measures to attain the State ambient air quality standard for ozone by the earliest practicable date (13 CCR §70600(b)(2)) in order to help other adjacent air basins where ozone generated in the Bay Area is transported. Some of CARB's transport mitigation requirements are included among CCAA planning requirements for all non-attainment areas. To summarize the transport mitigation requirements, the District must:

1. Adopt and implement all feasible measures.
2. Adopt and implement BARCT.
3. Adopt a no net increase permitting program for sources above 10 tons per year.
4. Include measures to attain the standard in specified downwind regions.

The requirements to adopt all feasible measures and implement BARCT on all existing stationary sources are necessary for the Bay Area to meet both the CCAA and transport mitigation requirements, and are addressed in the control strategy as well as through District rule development and permitting processes. With respect to the no net increase requirement, the District adopted a 10 ton/year no net increase requirement for ozone precursors in District Regulation 2, Rule 2: New Source Review on December 21, 2004. Regarding measures sufficient to attain the State ozone standard in specified transport areas, this is accomplished by the requirement to adopt all feasible measures. As adoption of all feasible measures represents the most stringent control strategy that can be accomplished, this requirement is met with the approval of each triennial plan**.**

Therefore, per the CCAA, once feasible control measures have been identified, they are required to be included in the Ozone Strategy. Based on this requirement, alternatives that did not include all feasible measures were considered infeasible and were not considered.

The Further Study Measures are discussed in subsection 2.3.8 of the Draft EIR. Further study measures are measures for which insufficient information was available during the development of the control strategy to allow for a comprehensive review. For example, emissions data for some source categories or the emissions reduction potential of some control measures may be uncertain. In these cases, further study may be warranted if the other aspects of a suggested control, such as public acceptability and adverse environmental impacts appear positive. The 2005 Ozone Strategy includes a number of measures for evaluation – Further Study Measures; if and when those measures are found to be appropriate to be considered for adoption the District will take the necessary steps to adopt the measure or include it in a future planning document. These measures have not reached a stage when they would be appropriate as alternatives under CEQA. Moreover, the District staff is unaware of any potential adverse environmental impact identified in the EIR that could be avoided by either by substituting or adding one or more FSM. In this regard we note that the potential environmental impacts associated

with Further Study Measures are speculative and not evaluated in this EIR because they are not included as commitments in the 2005 Ozone Strategy. Additional CEQA review will be required if any of the Further Study Measures are proposed to be implemented.

LAW OFFICE OF MARC CHYTILO

ENVIRONMENTAL LAW

November 21, 2005

Jack Broadbent, APCO
Bay Area Air Quality Management District
939 Ellis Street,
San Francisco, CA 94109

By US Mail

Suzanne Bourguignon
Principal Environmental Planner
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939 Ellis Street,
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By Email: sbourguignon@baaqmd.gov
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RE: CEQA Comments, 2005 Ozone Strategy

Dear Mr. Broadbent and Ms. Bourguignon:

This office represents Transportation Solutions Defense and Education Fund ("TRANSDEF") in this matter. Please accept our comments on the draft environmental impact report (DEIR) for the 2005 Ozone Strategy.

We note continuing difficulties securing documents. This office requested a copy of the 2005 Ozone Strategy and its EIR by telephone upon receiving notice of their availability. The 2005 Ozone Strategy was provided, but not the environmental review document. This omission was discovered too late to make a further request. We appreciate the web-positing, but did request a hard copy that was not sent. 3-1

We previously requested an extension of the comment period for the plan to coincide with the environmental review document, but were denied. We would like to believe in the District's commitment to public process and receipt of comment, but after years of frustrations, we still find impediments to participation. We note that many of our comments reiterate concerns articulated about previous Clean Air Plan environmental review documents.

Comment 1 – Latent impacts from less aggressive strategy

Given that the purpose of CEQA's environmental review document is to inform "decisionmakers, and the public generally, of potentially significant adverse environmental effects of a project," (DEIR p. 1-3), the EIR must disclose the fact that more aggressive air pollution control strategies would reduce adverse human health effects from the exposure to ozone. The latent adverse effects upon public health of the District's failure to more promptly achieve the California Ambient Air Quality Standard for ozone should be identified as a 3-2

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significant impact. Additionally, the health effects of this project, in terms of premature deaths, asthma attacks, and other air pollution related symptoms, should be disclosed.

3-2 concluded

Comment 2 – Inadequate Baseline - visibility

The DEIR fails to adequately characterize the effect of air pollution-related haze on Bay Area views and aesthetics, as well as the effects of transported haze to downwind communities in Sacramento and the San Joaquin Valley. This baseline is essential to evaluate the project's impacts – does one set of selected control strategies improve visibility better than another? And are there visibility consequences from the project as proposed and considered? These questions are ignored as the baseline is not established.

3-3

Comment 3 – Alternatives analysis

The environmental review document fails to include a reasonable range of alternatives, since no alternative achieves improvements in local and/or regional visibility, none accelerates air quality improvement faster than the proposed project, and none achieves air quality to the point of predicting attainment. The EIR is required to provide the District decisionmakers and the public with sufficient information to select and advocate, respectively, the most appropriate project. The selection of a narrow range of alternatives, none of which really achieves the California Clean Air Act's purpose of attainment, condemns the environmental review document's adequacy.

3-4

Comment 4 - Shifting project description

The District described one project for the NOP, then another in the DEIR. Given the extensive comments to the NOP (that filled an entire volume of the 2005 Ozone Strategy) the District should have alerted the public and interested agencies of the decision to abdicate its responsibilities under the federal 1-hour ozone standard, *to wit*, to adopt and submit a maintenance plan. Various elements of the project described in the NOP have been dropped without explanation.

3-5

Comment 5 – Inadequate project description

Central to an adequate environmental review document is a complete statement of the project objectives. Guidelines § 15124(b). In this case, the objective is to comply with the California Clean Air Act's requirements. Page 1-6. As noted in the DEIR, the California Clean Air Act requires plans "for attaining the standard," (p. 2-3), including periodic plan revisions. The plans "must contain estimates of current and future emissions of pollutants that form ozone" and thus represent a revised plan for purposes of Health and Safety Code § 40233's transportation sources plan requirements. The project fails to achieve the stated objectives, as it fails to estimate emissions reductions needed for attainment, after professing the ability to do so. Further, the

3-6

project omits the California Clean Air Act's mandated periodic revision to the " emissions reductions from transportation sources necessary to attain the state and federal ambient air quality standards." Future estimated emissions inventories are not included, including the mobile source emissions inventory, and there is no prediction of the emissions reductions necessary for attainment. As such, the Project description is inadequate for including all statutorily mandated elements, such as the estimate of emissions reductions necessary for attainment and the concomitant § 40233 transportation sources plan.

3-6 concluded

Similarly, the absence of mandated contingency measures in the 2005 Ozone Strategy render its project description inadequate – the project objectives are to comply with the mandated air quality planning requirements, yet the 2005 Ozone Strategy fails to do so.

In light of these glaring omissions, the DEIR should be re-circulated with a complete project description, including compliance with all California Clean Air Act requirements, not only those the District chooses.

Comment 6 – Precursor tradeoffs

The DEIR does not adequately describe the conflict between VOC-based control strategies, which have been in the past projected to achieve improved Bay Area air quality more quickly that dual-precursor strategies, and the proposed dual-precursor strategy that is slower at improving Bay Area air quality, but which also reduces air pollution transport. Alternatives should examine the relative merits and detriments of differing approaches. This fundamental issue must be disclosed and the relative merits and detriments of the approach evaluated for informed decisionmaking and meaningful public participation.

3-7

Comment 7 – Environmental Justice

The DEIR is incorrect in stating flatly that environmental justice issues may not be considered in the environmental review document. Environmental justice issues are relevant, and must include examination of any reasonably foreseeable effects of Plan adoption and control strategy implementation upon specific communities. For example, certain control strategies will increase emissions at particular locations – e.g. diesel emissions near freeways from increased diesel bus use, carbon monoxide and toxics hotspots, or refinery emissions control strategies increasing secondary emissions. These emissions increases, as well as the continuation of emissions that might otherwise be controlled, should be mapped against maps of know sensitive receptors. (See BAAQMD CEQA Guidelines, pages 10-11.)

3-8

Additionally, Bay Area demographic data should be integrated with data reflecting which geographical areas will experience substantial reductions, moderate reductions, and any that will experience increases in emissions. TRANSDEF believes that the 2005 Ozone Strategy has the

potential to benefit more affluent suburban communities affected by ambient air quality to the detriment of urban communities that have more exposure to air pollution hotspots.

3-8 concluded

Comment 8 – Particulate matter increases

Contrary to the 2005 Ozone Strategy's proclamation, increased particulate matter emissions and ambient air quality concentrations of particulate matter are affected by the project's balancing of stationary source versus mobile source measures. TCMs reasonably available would reduce VMT and vehicle-based particulate matter emissions, which are a significant fraction of the emissions inventory. The 2005 Ozone Strategy should examine alternatives that more aggressively employ TCMs to both improve regional air quality, reduce transport and reduce the rate of particulate matter emissions inventory growth.

Additionally, the 2005 Ozone Strategy EIR must examine the effect of its plan and control strategies upon the Bay Area's compliance with the California Clean Air Act's particulate matter requirements. Although District has generally taken the position that those elements of the California Clean Air Act with no firm and enforceable deadlines may be ignored at their discretion, a CEQA document that fails to evaluate the relationship is inadequate, and where significant impacts to particulate matter result, as here, alternatives and mitigation measures that ameliorate those impacts be considered. The District could, for example, adopt a particulate matter attainment plan and control strategy that is integrated with its ozone strategy.

3-9

Comment 9 – Biological resources

With the District's first plan-based admission of the effects of significant Bay Area air pollution transport to the San Joaquin Valley and beyond, the 2005 Ozone Strategy must examine the effect of Bay Area emissions on Sierra alpine and sub-alpine biological resources. For example, visibility, tree-death and other dramatic biological losses are currently being caused by air pollution in the Sierra mountains. While local San Joaquin Valley emissions are also likely to be a significant part of this impact, equally undoubtedly Bay Area transported air pollutants also contribute. This significant impact must be identified and considered in the DEIR, and alternatives and mitigation measures considered.

3-10

Comment 10 - Land use issues

The impotence of transportation control measures in the 2005 Ozone Strategy is demonstrated in the DEIR's § 3.10.3. The baseline is uncontrolled growth and increased emissions commensurate with population increases. Clearly, land use strategies hold the only long-term means to achieving and maintaining health based ambient air quality standards in the Bay Area into the future. Per capita emissions could and should be reduced through the 2005 Ozone Strategy transportation control measures.

3-11

It is generally disappointing that the District is unwilling to use the 2005 Ozone Strategy to more aggressively integrate air quality planning and attainment objectives with land use patterns and transportation planning --the very areas that have historically prevented the District from achieving attainment. As noted by various NOP comments, the Bay Area has promoted public transit expansion in some places that have exacerbated sprawl and expansion of the urban area, while refocusing enhanced transit to existing urban areas offers a substantially more cost-effective and air pollution control-effective transit system. Until the Bay Area's sprawling land use patterns are curbed, air pollution will always remain a major problem for the Bay Area.

3-11 concluded

Comment 11 – All feasible measures and alternatives analysis

TRANSDEF understands that the District's response to the thrust of TRANSDEF's objections has been and will be that all feasible measures are required and utilized, so nothing more can be done. We respectfully disagree and suggest much more can and should be done.

The Air Resources Board definition of all feasible measures allows various economic, cost-effectiveness and other restraints to be used to narrow the scope of control strategies considered. TRANSDEF contends that these constraints should be lifted (or at least publicly articulated) for purposes of consideration of alternatives and in the case of transportation control measures in the 2005 Ozone Strategy.

Specifically, 17 Cal. Code of Regs. § 70600(a)(1) provides:

> "all feasible measures" means air pollution control measures, including but not limited to emissions standards and limitations, applicable to all air pollution source categories under a district's authority that are based on the maximum degree of reductions achievable for emissions of ozone precursors, taking into account technological, social, environmental, energy and economic factors, including cost-effectiveness.

3-12

This definition inherently allows the District to exercise subjective judgment in considering control strategies. In light of the relatively smaller emissions reductions associated with TCM implementation, the District appears to have discounted and discarded potentially available transportation control measures and strategies that have long-term substantial benefits to the Bay Area's air quality improvement efforts. In order to avoid such questions and publicly explain the District's decisionmaking rationale, TRANSDEF requests that the District employ more transparent and objective criteria to delineate its air pollution control choices, and expand its horizons when considering potentially applicable transportation control measures.

Expanding the definition of feasible measures, especially in the transportation control measure context, substantially expands the universe of CEQA alternatives that could and should be

considered. The artificial limiting of alternatives based on skewed, subjective feasibility criteria that have not been disclosed to the public taints the adequacy of the CEQA environmental review document.

3-12 concluded

Comment 12 – Population assumptions are not articulated

Under the District's CEQA Guidelines, future local plans must be consistent with the applicable Clean Air Plan, which has now been named the Ozone Strategy. BAAQMD CEQA Guidelines page 21-22, 12/1999. The 2005 Ozone Strategy serves as a cap on growth, since local plans must conform to the population estimates used in the 2005 Ozone Strategy. It is not apparent that these population numbers are specified in the 2005 Ozone Strategy, creating the potential for substantial increased population growth without encountering the air quality limitations that would impose consideration of alternatives and mitigation measures under CEQA. The 2005 Ozone Strategy appears growth-inducing without an express articulation of the population figures that are air quality-related limits for local plans.

3-13

Similarly, regional demographic trends demonstrate that any increase in VMT in any jurisdiction in the Bay Area constitutes a significant impact to air quality. These cumulative impacts may be mitigated by the adoption of BAAQMD CEQA thresholds that acknowledge a finding of significant impact for any project increasing VMT, as any such increase delays attainment and causes and/or contributes to nonattainment. This finding allows the imposition of CEQA's environmental review document requirement, and creates opportunity for the identification of project alternatives and an environmentally superior alternative.

Comment 13 – Project inconsistency with local CEQA thresholds

The District CEQA thresholds also require comparison of the rates of VMT growth to population growth rate. Id., at 22. ABAG observes population growth at or less than 1% per year in most Bay Area communities, yet the per capita VMT growth rate is approximately 1.4%. Using BAAQMD CEQA thresholds, this is a significant impact that should be recognized in the EIR.

The 2005 Ozone Strategy must examine alternative levels of VMT and include expanded transportation control measures to reduce future VMT to improve future ambient air quality and avoid the significant impact from excessive VMT growth. Enhanced project mitigation and more aggressive and effective strategies for development projects to avoid, reduce and offset their air pollution emissions and VMT increases is a viable and feasible 2005 Ozone Strategy air pollution control strategy that should be included as part of a Plan alternative and/or control strategy.

3-14

Thank you for your consideration of our comments in this matter.

Sincerely,

/S/
Marc Chytilo

CC: Sacramento Air Quality Management District
San Joaquin Valley Air Pollution Control District
Communities for a Better Environment

COMMENT # 3

Marc Chytilo
Law Offices of Marc Chytilo
November 21, 2005

Response 3-1

The District staff appreciates your comments and will continue to improve on efforts to make the public participation process available to all interested parties.

Response 3-2

As discussed in Response 2-14, the District is required to adopt and implement all feasible control measures and implement best available retrofit control technology or BARCT on all existing stationary sources of ozone precursor emissions as expeditiously as practicable (13 CCR §70600(b)(1)). In addition, the District must include measures to attain the State ambient air quality standard for ozone by the earliest practicable date §70600(b)(2) in order to help other adjacent air basins where ozone generated in the Bay Area is transported. The District considered 390 control measures and distilled the list down to those included in the 2005 Ozone Strategy. The District is not aware of any additional or "more aggressive" control measures to consider and the commentater has not suggested any.

The commenter suggests that "the EIR must disclose the fact that more aggressive air pollution control strategies would reduce adverse human health effects from the exposure to ozone" and that "latent adverse effects upon public health of the District's failure to more promptly achieve the California Ambient Air Quality Standard for ozone should be identified as a significant impact." These comments reveal a fundamental misunderstanding of the CEQA review. Certainly the question whether the District has gone far enough in developing a strategy to meet the state ozone standard is a central concern of the project in relation to the CCAA planning requirements. The purpose of the CEQA review, however, is to understand the environmental impacts that may occur as a result of implementing the control measures in the 2005 Ozone Strategy. In fact, as noted in the EIR, the overall effect of the proposed project (implementation of the 2005 Ozone Strategy) is expected to be a decrease in VOC and NOx emissions and a related decrease in ozone, providing an overall air quality and public health benefit. See Response 2-3 for additional discussion of this issue.

Response 3-3

In large part, this comment concerns the 2005 Ozone Strategy and not the Draft EIR. The commenter suggests that inadequacies in the baseline for pollution-related haze prevented meaningful consideration of alternatives. We disagree.

Pollution related "haze" is a combination of a number of pollutants, including PM10. However, as noted in Response 2-9, NOx control measures will also lead to a reduction in PM10. All of the mobile source measures will help reduce PM emissions, with the diesel equipment idling ordinance measure (MS-1) and the low-emission vehicle incentives measure (MS-3) helping to reduce diesel PM specifically. All of the transportation control measures, by reducing vehicle trips and vehicle miles traveled will have the additional benefit of reducing PM emissions from fossil fuel combustion and re-entrained road dust. A reduction in emissions in the Bay Area will reduce the emissions available for transport of pollutants into downwind areas, providing air quality and public health benefits in those areas as well.

The environmental baseline associated with transport of pollutants outside of the Bay Area is addressed in section 3.4.1.4 of the Draft EIR. The potential impacts from the transport of pollutants associated with implementation of the control measures in the 2005 Ozone Strategy is addressed in section 3.4.3.1 under Potential Adverse Impacts and Ozone Transport. As explained by the analysis in the EIR, decreasing NOx and VOC emissions within the Bay Area through implementation of the 2005 Ozone Strategy is expected to decrease ambient ozone concentrations in the Bay Area and to decrease the available ozone and ozone precursors available for transport into neighboring air basins.

Moreover, because the District is unable to identify measures to reduce emissions of ozone precursors by five percent or more per year as otherwise required by Health and Safety Code § 40914(a), the District uses the "all feasible measures" alternative authorized in § 40914(b). For this reason, the District has included all feasible measures in the 2005 Ozone Strategy; consequently there are not alternative sets of measures to consider and choose between as the commenter suggests.

Response 3-4

While the EIR may differ somewhat from the traditional EIR, the commenter has spelled out the various reasons why this is so. See Response 2-14 regarding the alternative analysis. Since the District is currently pursuing an "all feasible measures" planning effort, a strategy specifically authorized by the CCAA, determining the attainment date is not necessary or required as part of the 2005 Ozone Strategy under the California Clean Air Act. The remainder of this comment concerns the adequacy of the 2005 Ozone Strategy and not the Draft EIR.

Response 3-5

The 2005 Ozone Strategy describes how the San Francisco Bay Area will make progress toward the State one-hour ozone standard as expeditiously as practicable and how the region will reduce transport of ozone and ozone precursors to neighboring air basins. At the beginning of this ozone planning process, the 2005 Ozone Strategy was to include requirements related to the national one-hour ozone standard; however with the revocation of the national one-hour standard in June 2005, the District has decided to move forward with this Strategy as a state triennial update as required by the CCAA.

The project description did not change the control measures included in the 2005 Ozone Strategy nor did it substantially change the environmental analysis. All environmental resources on the CEQA checklist were evaluated in the impact analysis in the EIR. Finally, there is no requirement to re-circulate the NOP when changes are made to a proposed project. The EIR evaluated the project as currently proposed and the public was given 45-days public notice as required under CEQA.

Response 3-6

The project objectives are outlined in section 1.1.6 of the EIR and are as follows:

- Comply with the 1988 California Clean Air Act requirements including:
  1. Apply best available retrofit control technology (BARCT);
  2. Implement all feasible measures through an expeditious implementation schedule;
  3. Reduce population exposure to ozone and its precursors according to a prescribed schedule;
  4. Provide for the attainment of the State ozone ambient air quality standard at the earliest practicable date.
- Comply with transport mitigation requirements in Health and Safety Code §40912.

Contrary to the comment, the District staff believes that the 2005 Ozone Strategy achieves the above objectives.

The commenter's enumerated concerns about the project description are actually claims that the 2005 Ozone Strategy is inadequate, cloaked in CEQA terminology. See Response 2-3 regarding the distinction between these two sets of issues. And see Responses 2-13 and 3-4 regarding the attainment demonstration requirements. Future estimated emission inventories were included in the 2005 Ozone Strategy and EIR. Emission inventories for VOC and NOx were estimated in the 2005 Ozone Strategy and included in Table 3.4-4 of the EIR for 2000, 2003, 2005, 2010 and 2020 and include both mobile and stationary sources.

The requirement to include contingency measures is inconsistent with the use of the "all feasible measures" alternative authorized under Health and Safety Code § 40914(b) and used by the District in preparing the 2005 Ozone Strategy. Contingency measures are required under § 40915 for implementation upon a finding by the state board that the District is failing to achieve interim goals or maintain adequate progress toward attainment. Neither of those situations is applicable to implementation of an "all feasible measures" plan.

Response 3-7

The EIR discusses the potential adverse impacts and ozone transport in section 3.4.3.1 – Criteria Pollutants. Although in the Bay Area NOx reductions alone have the potential to increase ozone, a strategy of concurrent reductions of the major precursors of ozone, VOC and NOx, has been successfully used for some time to reduce ozone levels in the

Bay Area on all days of the week, including weekends. Historical trends of air monitoring data show substantial reductions in ozone concentrations and therefore the public's exposure to ozone. Combined reductions of VOC and NOx has been used for about 15 years to reduce ozone levels in the Bay Area, thus are not believed to be counter-productive for attaining ambient air quality standards. The 2005 Ozone Strategy includes control measures that will reduce both NOx and VOC. This strategy is expected to prevent an increase in ozone concentration that might occur from decreases in only NOx emissions.

Response 3-8

Currently there are no requirements to analyze environmental justice as a separate issue in the CEQA process. The commenter disingenuously suggests that the DISTRICT CEQA Guidelines require mapping emissions increases against maps of known sensitive receptors. The language relied upon relates to land use conflicts, specifically in the context of a development project. The adoption of a plan to reduce ozone is a very different type of project and warrants different treatment. As required by CEQA, however, the District has considered the impacts of potential localized increases in air pollutants as a result of implementing control measures in the 2005 Ozone Strategy. In proposing the plan, the District is carrying out its obligation to address air quality issues wherever they exist. Contrary to the commenter assertion, the District is not aware of any data that would support the commentator's opinion that the 2005 Ozone Strategy has the potential to benefit more suburban communities to the detriment of urban communities. Rather, the 2005 Ozone Strategy is expected to provide overall emission reductions, and air quality and public health benefits to anyone who lives or works in or visits the Bay Area.

Response 3-9

The 2005 Ozone Strategy does consider impacts on the District's obligations to attain the State Ambient Air Quality Standards for particulate matter. See Responses 2-8 and 2-9 regarding PM10 impacts. Also, see the Alternatives Analysis in Chapter 4 of the EIR. As noted in Response 2-8, PM10 emissions associated with the proposed control measures in the 2005 Ozone Strategy are minor; however, PM10 emissions are expected to increase in the Bay Area due to population growth and related activities. Alternative 2 evaluated in the EIR includes a greater emphasis on implementing control measures that mitigate in part air quality and transportation and traffic impacts identified with some of the TCMs, particularly those control measures that improve access to transit facilities and encourage increased use of low emission vehicles. But this alternative was not expected to avoid or lessen the potentially significant adverse impacts of the proposed project and was rejected. The 2005 Ozone Strategy includes all feasible control measures; no additional feasible TCMs have been suggested by the commentater.

Response 3-10

This is primarily a comment addressing the adequacy of the 2005 Ozone Strategy and not the Draft EIR. See Response 3-3 regarding transport of air pollutants. The impacts of ozone transport were evaluated in 3.4.3.1 of the EIR. With regard to the impacts of implementing the 2005 Ozone Strategy, we note that the overall impact of the control measures is expected to be a reduction in NOx and VOC emissions and a related reduction in ozone available for transport to downwind communities. So no significant impacts on Sierra alpine and sub-alpine biological resources are expected due to the 2005 Ozone Strategy.

Response 3-11

This comment concerns the 2005 Ozone Strategy and not the Draft EIR. As noted in the Draft EIR, the District, MTC, and ABAG will highlight and publicize noteworthy examples of local clean air plans, policies and programs, as well as noteworthy development projects. The regional agencies are aware that land use strategies are important to achieving and maintaining ambient air quality standards. Fundamentally, land use planning and control is the province of the counties and cities. Nevertheless, the District will continue to provide input into the land use decision making process to ensure that air quality issues are addressed in that decision making process. Also please note that that the TCMs in the 2005 Ozone Strategy are expected to reduce emissions of all criteria pollutants.

Response 3-12

See Response 2-14 regarding the alternatives analysis and Response 2-4 regarding the determination of the appropriate control measures. As noted by the commenter, the District has included all feasible control measures in the 2005 Ozone Strategy. Contrary to the commenter's apparent belief, the Air Resources Board's definition of "all feasible measures" is intended to be broadly inclusive of measures that are capable of achieving needed emission reductions. The commenter's call to expand the universe of transportation control measures considered does not provide a single example of a transportation control measure that should have been included in the 2005 Ozone Strategy or evaluated in the EIR. Therefore, District staff still believes that there are no additional feasible control measures that should be considered at this time.

Response 3-13

The comment that the 2005 Ozone Strategy serves as a cap on growth, since local plans must conform to the population estimates used in the 2005 Ozone Strategy, is incorrect. The 2005 Ozone Strategy uses the emission inventory for stationary sources developed by the District. However, the 2005 Ozone Strategy emission inventory for on-road motor vehicles is based on forecasts developed by ABAG and MTC, and ARB emission factors. ABAG is responsible for developing the population growth estimates and MTC is responsible for motor vehicle activity projections. The District is required to use those

estimates as part of the emissions inventory in the 2005 Ozone Strategy. The 2005 Ozone Strategy does not change the motor vehicle emission budgets currently in force in the Bay Area for federal transportation conformity purposes, and does not "allow" for increased population growth. As noted in Table 1 of the Ozone Strategy, ABAG Projection 2003 were used to project future emissions from on-road motor vehicles. AGAB Projections 2002 were used to forecast the remainder of the planning inventory. As noted on page 15 of the Ozone Strategy, MTC's travel activity adjustments and ABAG projections used in preparing the ozone strategy on-road mobile source emissions inventory are the same as were used in the Air Quality Conformity Analysis for MTC's Transportation 2030.

In any event, the population estimates in the 2005 Ozone Strategy would not act as a cap under the District CEQA Guidelines. Rather, they are used as a threshold of significance to determine whether a local plan will have a significant adverse environmental cumulative impact that must be analyzed in a CEQA document.

Response 3-14

The commenter's assertion that projected regional VMT growth would be considered a significant impact under the District CEQA Guidelines is incorrect. The District Guidelines clearly state that the population and VMT thresholds are intended to be used in analyzing *local* plans; they were not intended as thresholds for regional plans.

The cumulative effect of the 2005 Ozone Strategy and other air quality programs are expected to result in a reduction in vehicle miles traveled in the Bay Area as compared to the No Project Alternative, thus providing beneficial impacts to the transportation system. Localized impacts, as discussed in the project-specific impacts in the EIR may occur. However, on a cumulative basis, the 2005 Ozone Strategy is expected to result in a reduction in vehicle miles traveled when compared to the No Project Alternative, or baseline conditions. Therefore, no significant adverse cumulative impacts on transportation and traffic are expected. The population growth and related VMT referred to in this comment is unrelated to implementation of the 2005 Ozone Strategy. That is, the strategy includes control measures to respond to this growth, but is not responsible for this growth. Moreover, while the commenter indicates that enhanced project mitigation and more aggressive and effective strategies for development projects to avoid, reduce and offset air pollution emissions and VMT increases should be considered, no suggestions on feasible strategies have been provided. The District staff believes that all feasible control measures have been identified and included in the 2005 Ozone Strategy.

TRANSPORTATION SOLUTIONS DEFENSE AND EDUCATION FUND

16 Monte Cimas Avenue, Mill Valley, CA 94941 415-380-8600 Fax: 415-383-0776

November 21, 2005
By E-mail & U.S. Mail

Jack Broadbent, APCO
BAAQMD
939 Ellis Street
San Francisco, CA 94109

Re: Comments on 2005 Ozone Strategy DEIR

Dear Mr. Broadbent:

The Transportation Solutions Defense and Education Fund, TRANSDEF, is an environmental non-profit advocating the regional planning of transportation, land use and air quality in the Bay Area. We appreciate this opportunity to comment on the Draft Environmental Impact Report ("DEIR") for the Bay Area 2005 Ozone Strategy ("Plan").

General Comments

The three measures from the previous Clean Air Plan that are proposed for deletion (pages 35-36 of the Plan) represent part of the Baseline of the No Project Alternative. Therefore, the impacts of their deletion must be studied in the DEIR. We could find no mention of these measures in the DEIR. 4-1

The two year delay in the adoption of this Plan has meant that the residents of the District have suffered excessive pollution without the new and more effective control measures they were legally entitled to. The DEIR should identify the impacts of the delayed adoption, including public health impacts. 4-2

The DEIR is stuck in the rut of looking for the negative impacts of control measures, making it largely oblivious to the environmental benefits generated by a regional plan. Where future conditions are predicted to be much worse than current conditions, as in the Bay Area, a truly responsible agency would use its powers to make the future better. For example, the RTP predicts a dramatic increase in traffic congestion. The DEIR for the Ozone Strategy, unfortunately, is myopic. Its focus on air quality causes it to ignore the great deterioration in quality of life caused by the environmental impacts of growth and regional development, including increased noise and congestion and loss of open space and habitat lands. 4-3

We believe the Ozone Strategy should be attempting to do whatever it can to make future conditions as close as possible to current conditions. That was the whole point of the Regional Agencies Smart Growth Strategies process. The air quality benefits of a 4-4

vigorous implementation of Smart Growth have been ignored. Unfortunately, with its goal of making only marginal improvements to the conditions predicted for the future (the Baseline), the District sets a very low bar for itself as to what can be accomplished, and what should be accomplished. The District stands in marked contrast to the Port of Los Angeles, which recently announced a truly vigorous emissions reductions program. 4-4 concluded

Page-Referenced Comments

p. 1.4: The Plan and DEIR did not adequately respond to the NOP comments of the Contra Costa County Community Development Department suggesting developer-based trip reduction ordinances (DEIR Volume II, p. B-2). While TCM 15 contains useful concepts for improving land use decisions, it does not propose a comprehensive developer-based trip reduction ordinance, even after the County asserted that the District had "reasonable authority to implement such measures" and stated that "The Draft EIR should examine the mitigation measures or alternatives to the TCMs proposed [by] the Ozone Strategy that can reduce these secondary impacts" of the "continued conversion of land to higher intensity uses and [its] impact [on] our natural resources."

Neither does TCM 15 propose anything based on the SMAQMD Land Use Mitigation program, or its Land Use Mitigation Indirect Source Rule (DEIR Volume II, pp. B-48-54 & B-66). When other agencies suggest that the District adopt rules that are either already in effect, or soon will be, the District is obligated to either adopt similar rules or provide a detailed explanation, supported by substantial evidence in the record, as to why such a rule is not feasible. The 'BAAQMD Evaluation' of the 'Topic Raised by Public' is vague and incorrect. An honest evaluation would be that the District is afraid to be aggressive in its involvement with land use practices. The purpose of environmental review is to bring out areas of controversy for informed decisonmaking. By not stating the controversy openly, the DEIR prevents policymakers from addressing and resolving it. 4-5

p. 1.4: "Transit" is misspelled. 4-6

p. 1.4: Because MTC is not responsible for the overall planning of air quality, it is entirely appropriate that the air quality Plan contain TCM 8 language directing MTC to accomplish specific air quality goals when compiling its HOV Lane Master Plan. Otherwise, the HOV Lane Master Plan will be driven by considerations other than air quality. 4-7

p. 1-5: The first column heading of Table 1-1 does not need a hyphen. 4-8

p. 1-5: The reasons that the region attained the federal 1-hour ozone standard are directly relevant to the concerns raised by TRANSDEF that the clean data of recent years are but a repeat of the past pattern. 4-9

p. 1-5: We disagree that the DEIR is not required to address environmental justice. Under both State and federal law, the District is prohibited from discriminating against 4-10

people because of race or ethnicity. The DEIR needs to conduct an environmental justice analysis of the impacts of its control measures, to determine whether they either disproportionately impact communities that are already overly impacted, or whether they provide beneficial effects that help communities reduce the impacts from which they are already suffering. Without an EJ analysis, such impacts would not be discovered. 4-10 concluded

pp. 1-11 & 5-1: A significant irreversible environmental change that is ignored because it is part of the Baseline is global warming. This is possibly the most frightening environmental change of all. Current science points to global warming as irreversible, once fossil fuel emissions achieve some critical level. It is a failure of environmental planning to ignore such a crucial environmental change, given the predicted loss of habitat and species coupled with famine, floods, storms, drought and massive property damage. While it is understandable that such catastrophic consequences would provoke societal denial, it is not acceptable that a responsible environmental document be allowed to remain in denial. The failure to seriously address this issue as if it were the looming catastrophe we all know it is is deeply irresponsible. At a minimum, the EIR needs to identify the likely consequences of global warming as part of the environmental setting, and demonstrate the beneficial impacts that will derive from the Ozone Strategy. 4-11

p. 2-18 - 2-19: Shouldn't the Altamont Commuter Express be deleted from TCM 4, as it is an interregional program listed in TCM 6? Its benefits appear to be double-counted. 4-12

p. 2-28 – 2-29: It is very odd that in no point in the DEIR other than a quick reference buried in the text on page 3-52 are the grand total emissions reductions displayed. Is this because the Ozone Strategy has such puny results that totals would be embarrassing? 4-13

p. 3-4: As part of the environmental setting, define regional haze levels. Provide data on the constituent components of regional haze, including the contribution of ground-level ozone and its precursors. Provide a narrative describing the District's responsibility to protect scenic resources by controlling regional haze, and what it is doing in furtherance of those responsibilities. 4-14

p. 3-7: The Plan is expected to have the beneficial impact of reducing the conversion of open space and agricultural lands by promoting Smart Growth, thereby preserving scenic resources. 4-15

p. 3-10: The analysis of the cumulative impacts on agriculture is grossly inadequate, including especially the impacts of TCM 15. The benefits of the Plan, including the preservation of agricultural lands, must be evaluated. 4-16

p. 3-15: Select or create a single annual measurement that best captures the severity of weather patterns in generating ozone (would degree-days be the best one, or is there a need to integrate wind pattern data?). Provide the following companion charts to Figure 3.4-1: 1). Plot ozone-generating weather severity by year. 2). With weather severity still on the Y axis, plot the number of exceedence days on the X axis. Provide 4-17

Year labels for the data points, even if this involves drawing lines to connect the label to the data point. These charts will allow a rough comparison of emissions levels for years with similar weather, which will be useful in evaluating the claim that the District is making progress in reducing emissions. 4-17 concluded

p. 3-31: Other secondary impacts of TCM 8 are increases in highway capacity and a corresponding induced vehicle trip demand, leading to higher VMT. Demonstrate through a careful analysis of induced demand that the net impact of TCM 8 will actually be a reduction in criteria pollutants. 4-18

p. 3-48: Is it correct that the Plan will result in a reduction in mobile source emissions from current levels, even after projected growth, or is this reduction only as compared to the No Project Alternative? Imprecision in language here and elsewhere could cause serious misunderstandings about the efficacy of the Plan. 4-19

p. 3-50: Is it correct that the Plan will promote a net decrease in greenhouse gases over current levels, after projected growth, or is this decrease only as compared to the No Project Alternative? 4-20

p. 3-52: The DEIR references the CCAA requirement of Sect. 40918 "to substantially reduce the rate of increase of vehicle trips and vehicle miles traveled" on pages 1-8 and 2-15, yet fails to analyze whether the Plan complies with this requirement. The best the DEIR can do is to make the vague claim that "The cumulative effects of the 2005 Ozone Strategy and other air quality rules, regulations and plans are **expected to be** a reduction in vehicle miles traveled in the Bay Area compared to the No Project Alternative or baseline." (p. 3-52, emphasis added.) Where is the quantitative analysis of the reduction of regional VMT as compared to the baseline? Without an analytic method and quantitative results, the DEIR cannot validly claim any conclusions pertaining to VMT. Clearly, it fails miserably to meet the statutory requirements of the CCAA. 4-21

p. 3-52: How can the DEIR claim that a reduction in VMT is beneficial to the transportation system, when MTC has never acknowledged this? MTC does not treat increases in VMT as significant impacts (despite this being obvious). 4-22

p. 3-52: We hereby adopt TRANSDEF's comments on the Plan itself by reference. In particular, by presenting a history of the fallacious Clean Air Plan mobile source emissions predictions, we cast grave doubt on the prediction of future mobile source emissions reductions, which are crucial to the reductions in criteria pollutant levels predicted by the Plan and DEIR. 4-23

p. 3-53: Is it correct that the Plan will promote an overall decrease in VMT over current levels, after projected growth, or is this decrease only as compared to the No Project Alternative? Where are the numbers? 4-24

p. 3-57: The Plan is expected to have the beneficial impact of reducing the conversion of open space and agricultural lands by promoting Smart Growth, thereby preserving wildlife habitat. 4-25

p. 3-94: The significance criteria for impacts on land use and planning evidences a pathetically backwards approach to planning. The Plan is by definition a regional plan. A regional plan can do so much more than just conflict with local plans——it can create beneficial impacts. A regional plan can **improve** local plans by providing an over-arching vision and implementation scheme, giving local plans a structure by which to accommodate future growth with reduced environmental impacts. Impacts should be considered significant and beneficial if the cumulative regional negative impacts of the Plan are less than the Baseline. Look at the analysis of the TRANSDEF Smart Growth Alternative in the EIR for the 2005 RTP, where lower impacts made our alternative the environmentally superior alternative. That was a significant beneficial impact to land use and planning. 4-26

p. 3-96: The analysis of the cumulative impacts on land use and planning is grossly inadequate, including especially the impacts of TCM 15. The benefits of the Plan must be evaluated. 4-27

p. 3-109: A recitation of the projected increase in VMT is suspiciously absent. 4-28

p. 3-109: In its NOP comment letter (DEIR Volume II, p. B-23), AC Transit made a series of important points that should have been part of the environmental setting leading to the development of corresponding control measures: the need to bring the region's investment in short distance transit trips up to their emissions-reducing potential; the need to place Smart Growth requirements for major transit investments into a TCM; the need to make transfers for transit passengers cheaper, as an incentive to use transit, to counter the free parking offered at transit stations; the need for regular funding of passenger amenities; and the need to find a stable source of funds for transit, so that service does not have to be reduced when sales tax revenues decline. MTC needs to analyze the susceptibility of the various transit operators to economic fluctuations, and devise a plan to make funding more stable. 4-29

p. 3-109: The District's own CEQA Guidelines provide another measure of significance: where the rate of growth of VMT exceeds the rate of growth of population. It would be illogical, unseemly and unsupportable to assert that impacts on the regional level can be ignored when the District insists the same impacts be considered at a local level. 4-30

p. 3-112: The discussion of TCM 7 discloses a projected increase in auto travel to access ferry terminals, thereby causing local congestion, not to mention additional VMT, cold starts and related emissions. These impacts should be mitigated by requiring that access to new ferry services be via non-auto modes. 4-31

p. 3-115: We repeat the comments we made about page 3-52 in respect to cumulative transportation/traffic impacts. In addition, "cumulative affect" should be "cumulative effect." 4-32

p. 4-1: In TRANSDEF's comments on the Plan, we harshly criticized the non-transparent process by which the feasibility of candidate control measures was evaluated. At the very least, the DEIR is required by CEQA Guidelines Sect. 15126.6(c) to provide a narrative about alternatives that were considered but rejected, **including the rejected candidate control measures**. There is no justification given for not having done this, nor would any be supportable. The TCMs in particular need to be demonstrated to have gone through a comparative rule review as rigorous as the CAPCOA review of stationary source measures. 4-33

As SMAQMD's NOP comment letter (DEIR Volume II, p. B-31-32) stated, "The range of alternatives must be sufficient to foster informed decisionmaking and public participation. Alternatives may be more costly than the project, and they may impede, to some degree, the attainment of project objectives. (CEQA Guidelines, sec. 15126.6.)" The Alternatives Analysis in the DEIR does not meet these requirements. In particular, it does not give decision-makers any serious policy options to weigh. The Plan is delivered to them as a *fait accompli*., with the EIR process being merely a procedural bother. TRANSDEF urges the District to use environmental review for the purpose for which it was intended: to provide a transparent public process in which to make informed decisions for the betterment of the public and the environment.

For the requirement to 'adopt all feasible measures' so as 'to attain by the earliest practicable date' to have any meaning whatsoever, the determination of feasibility must be made in a public transparent process. TRANSDEF proposes that the way to cure the failed process is to list in the Alternatives Analysis section under each justification for infeasibility the measures that meet that criterion, sorted by the degree of infeasibility. The Alternatives Analysis then needs to consider alternatives constructed of the more feasible of the so-called infeasible measures (recognizing that valid CEQA alternatives can have higher costs). Different alternatives will lead to different predicted attainment dates and margins of safety, with corresponding costs and social acceptabilities and respective environmental and public health benefits. Policymakers need to compare these alternatives to the District's chosen path to see the public health and environmental consequences of its timidity. 4-34

pp. 5-1 – 5-2: It is grossly misleading to grandly state "Implementation of the 2005 Ozone Strategy is not expected to result in significant irreversible adverse environmental changes." This is true only in comparison to doing nothing. During the implementation period, however, great irreversible changes will take place. The only difference is that the changes will not be the result of direct impacts of the Plan. They will be the result of other agencies' decisions taken because the Plan failed to act. In the absence of a state legal structure that calls for regional planning to reduce these irreversible environmental changes, the Ozone Strategy and Regional Transportation Plan act as *de facto* regional plans. These plans are where we express a regional 4-35

vision and figure out how to implement it. Just because the goal of the Ozone Strategy is air quality, the potential to influence the regional quality of life should not be shortchanged.

We vehemently disagree with the statement that "The largely irretrievable conversion of undeveloped/ agricultural land to urban uses is a function of the growing population and local land use authority, not the 2005 Ozone Strategy." The absence of a state growth management structure has meant that the region has been like a ship traveling without a captain. A regional plan provides direction by looking at the consequences of all the smaller decisions, and then providing steering for the greater good. By its decision to join the Joint Policy Committee, the District has formally committed to work with the other regional agencies to do its part on behalf of the region, using its regulatory authority. This Ozone Strategy DEIR, with its flawed analysis of Significant Irreversible Environmental Changes, demonstrates only the thinking that was prevalent **prior** to the Regional Agencies Smart Growth Strategies process. The time has come for the District to take its regional mission seriously. The best way to do that is with an exhaustive Alternatives Analysis to see what more can be accomplished.

4-35 concluded

TRANSDEF appreciates this opportunity to comment on the DEIR of this important regional document. We believe that much more needs to be done before the District can afford to be complacent. Please contact us to further discuss these comments.

Sincerely,

/s/ David Schonbrunn

David Schonbrunn,
President

CC: Sacramento Air Quality Management District
San Joaquin Valley Air Pollution Control District
Communities for a Better Environment

COMMENT # 4

David Schonbrunn
Transportation Solutions Defense and Education Fund
November 21, 2005

Response 4-1

See Response 1-1 regarding the three deleted control measures.

Response 4-2

The delay in completing the triennial review of the 2000 Clean Air Plan has not resulted in significant impacts on air quality and public health. As shown in the EIR (see Table 3.4-3), the air quality in the Bay Area was in compliance with most ambient air quality standards in 2004, except for the 1-hour state ozone standard (exceed on 7 days) and the 24-hour PM2.5 standard (exceed on 1 day). Further, the air quality was generally better in 2004 than 2003, as standards were exceed on fewer days in 2004.

Moreover, the delay in completing the triennial update did not delay rule development and TCM implementation. To the contrary, the District and MTC have continued to move forward with rules and program implementation, keeping ARB informed throughout this time period.

Response 4-3

This comment evidences a fundamental misunderstanding of the purposes of CEQA. The purpose of an EIR is to identify, analyze and reduce or avoid the negative impacts of a project. While the EIR does, in fact, point out environmental benefits where appropriate, CEQA specifically requires that the potential for significant **adverse** impacts be evaluated and has no requirements to evaluate environmental benefits. Also, please note that the overall population growth in the Bay Area is not part of the proposed project. Rather, the proposed project includes the air pollution control measures included in the 2005 Ozone Strategy. And while implementation of the project –the 2005 Ozone Strategy – has the potential to generate various significant adverse environmental impacts, which are the primary subject of the EIR, the plan is expected to result in overall emission reductions in the Bay Area.

Response 4-4

This comment evidences a fundamental misunderstanding of the purposes of CEQA. The purpose of an EIR is to identify, analyze and reduce or avoid the negative impacts of a project. The 2005 Ozone Strategy is expected to result in overall emission reductions in the Bay Area, thus improving the overall air quality. The strategy relies on the adoption of all feasible measures on an expeditious schedule. It is not intended to maintain current conditions as suggested in this comment; rather the goal is to attain the State one-hour

ozone standard. District staff believe that the 2005 Ozone Strategy includes all feasible control measures and an expeditious adoption schedule as required by state law. Smart growth policies are included in some TCMs, particularly such as those found in TCM 15.

Response 4-5

Most of this comment does not relate to the evaluation of the proposed project in the EIR, but rather questions the adequacy of the 2005 Ozone Strategy itself. The Topics Raised by the Public contained in the Draft EIR are those issues that were raised during the NOP public review period.

Response 4-6

Comment is noted and the correction will be made in the Final EIR.

Response 4-7

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

Congestion management and air quality are both important considerations of the HOV Lane Master Plan. Specific air quality goals are included in the control measure.

Response 4-8

No hyphen is included in the first column heading of Table 1-1.

Response 4-9

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The District staff disagrees with this comment because the most recent air quality data continues to show compliance with the federal 1-hour ozone standard, which was revoked in June of 2005.

Response 4-10

See Response 2-12 regarding environmental justice. The District did consider the potential adverse environmental impacts of the proposed control measures wherever the impact may occur, including the possibility of impacts resulting from cumulative impacts.

Response 4-11

The impacts of the project on global warming are evaluated in Section 3.4.3.3 of the EIR. The 2005 Ozone Strategy as a whole will promote a net decrease in greenhouse gases. The transportation control measures are intended to reduce vehicle miles traveled and they will reduce carbon dioxide emissions from motor vehicles as compared to the No Project Alternative. Other strategies that promote fuel efficiency and pollution prevention will also reduce greenhouse gas emissions, such as SS15 – Promote Energy Efficiency. Measures that stimulate the development and use of new technologies such as fuel cells will also be beneficial. In general, strategies that conserve energy and promote clean technologies also reduce greenhouse gas emissions.

Response 4-12

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

There are several cases (as with the mention of the ACE service expansion in TCM 4 and 6) in which some projects are listed in multiple TCMs. This does not constitute double-counting but rather illustrates the inter-relationship between TCMs and the need to implement particular projects for several reasons.

Response 4-13

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

Table 2-5 in the EIR provides the emission reductions for each control measure.

Response 4-14

See Response 3-3 regarding haze.

Response 4-15

Comment noted. The impacts of the 2005 Ozone Strategy on agricultural resources are included in Section 3.3 of the EIR. See Response 4-3 regarding environmental benefits.

Response 4-16

See Response 4-3 regarding environmental benefits.

Response 4-17

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The California Clean Air Act and CEQA do not require that the suggested analysis be included as part of the 2005 Ozone Strategy or EIR. However, air quality trends in the Bay Area are provided in Section 3.4.1 of the EIR (environmental setting for air quality). A 10-year air quality summary is included in Table 3.4.3. A 19-year summary of exceedences of the 1-hour state ozone standard is provided in Figure 3.4-1. Emission inventories for various years are provided in Figures 3.4-2, 3.4-3, and 3.4-5, and Table 3.4-4. The data provided in the EIR show the general air quality trends.

Response 4-18

As described in the 2005 Ozone Strategy, the emission reductions associated with TCM 8 are currently unknown; therefore, the EIR did not take credit for any emission reductions. Note that in general, HOV and bus express lanes are expected to increase average vehicle ridership, which reduces the number of vehicles on the roads and the related emissions.

Response 4-19

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The 2005 Ozone Plan is expected to result in overall emission reductions in NOx and VOC from existing conditions. Under the No Project Alternative, aspects of TCM 1 – Voluntary Employer-Based Trip Reduction Programs, TCM 3 – Improve Local and Areawide Bus Service, TCM 4 – Improve Regional Rail Service, TCM 6 – Improve Intercity Rail Service, TCM 7 – Improve Ferry Service, TCM 11 – Install Freeway Traffic Management Systems, TCM 13 – Transit Use Incentives, and TCM 15 – Local and Land Use Planning and Development Strategies that were approved as part of the 2000 CAP would still be implemented, and the impacts resulting from the implementation of the Water Transit Authority's adopted Implementation and Operations Plan would still remain.

Response 4-20

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

See Response 4-11.

Response 4-21

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The requirement in the CCAA is to reduce the rate of growth in VMT, not the absolute number. Examining VMT growth in the Transportation 2030 Plan prepared by MTC, in

different time increments, such as 2005, 2015, 2025, the rate of increase in VMT between these dates does decrease. Enhanced TCMs, as proposed in the 2005 Ozone Strategy, can further reduce VMT growth and emissions from what the Transportation 2030 Plan estimates, particularly due to the various pricing strategies recommended in the TCMs.

The emissions reported in Table 3.4-14 (page 3-52 of the Draft EIR) are the overall emissions in the Bay Area and include both stationary and mobile sources, as well as increases associated with population growth. However, ozone precursor emissions are predicted to decrease substantially between 2003 and 2010 even after taking into consideration population and VMT increases over this time period. The 2005 Ozone Strategy is a comprehensive document describing the Bay Area's strategy for compliance with State one-hour ozone standard planning requirements, including all reasonably available TCMs to reduce VMT growth as required by Health and Safety Code § 40918(a)(3); it is, however, an air quality document, not a transportation plan. While the District and commenter may disagree as to the magnitude of VMT reduction to be realized, there is no basis for a suggestion that the strategy will increase VMT.

Response 4-22

The methodology for calculating mobile source emissions takes into consideration, amongst numerous other variables, an estimate of daily vehicle miles traveled. Therefore, the District believes that reducing VMT could also reduce the number of vehicles using the transportation system on a daily basis and therefore provide beneficial impacts to the transportation system by reducing congestion.

MTC has indicated that VMT inevitably grows with population and job growth in the Bay Area. Within this context, MTC considers the changes in VMT when evaluating the overall impacts of various transportation investments on the transportation system and draws their findings based on such analysis.

Response 4-23

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3. The responses to comments on 2005 Ozone Strategy have been prepared in a separate document and are included as Attachment B in the Staff report for the 2005 Ozone Strategy.

Response 4-24

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

Please see response 4-21.

Response 4-25

Comment is noted. Please see Response 4-3 regarding beneficial impacts.

Response 4-26

The significance criteria used in the land use portion of the EIR are based on standard CEQA guidance found in the environmental checklist and is, therefore, consistent with the CEQA guidelines. It is not clear, moreover, what the commenter is suggesting with regard to the environmental review of the 2005 Ozone Strategy as the commenter has not presented any other alternative to the 2005 Ozone Strategy for staff to consider.

Response 4-27

See Response 4-3 regarding beneficial impacts.

Response 4-28

See Response 4-21.

Response 4-29

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

All feasible control measures have been included in the 2005 Ozone Strategy. See Response 2-4 regarding the development of feasible control measures.

Response 4-30

See Response 4-21. We note, additionally, that implementation of the control measures in the 2005 Ozone Strategy is expected to reduce not increase VMT when compared to baseline conditions.

Response 4-31

See the air quality mitigation section of the EIR (page 3-48) for mitigation measures for localized air quality impacts. Significant impacts have been identified for the potential increases of diesel exhaust emissions in localized areas near transit terminals. The increase in emissions can be reduced by encouraging non-drive access at the ferry terminals, such as proposed in TCM 5 – Improve Access to Rail and Ferries, and other measures in the 2005 Ozone Strategy, and this was included in the EIR.

Response 4-32

The typographical error noted by the commenter will be corrected. See Response 4-21.

Response 4-33

CEQA requires a discussion of alternatives considered to avoid or reduce that potential adverse environmental impact of the proposed project. The evaluation of alternatives under CEQA is set out in Chapter 4 of the EIR. See Response 1-1 regarding the rejected control measures, which are not part of the proposed project. There is no CEQA requirement to evaluate the impacts of control measures that are not included in the plan. See Response 2-4 regarding the development of feasible control measures.

Response 4-34

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The 2005 Ozone Strategy includes all feasible measures and an expeditious adoption schedule. See Response 2-14 regarding the alternatives analysis and Response 2-4 regarding the development of feasible control measures.

Response 4-35

This comment raises issues related to the adequacy of the 2005 Ozone Strategy itself and not the EIR. See Response 2-3.

The purpose of the 2005 Ozone Strategy is to ensure progress towards attainment of the 1-hour state ozone standard and not to limit population growth. The 2005 Ozone Strategy does not induce growth but responds to the estimated population growth in the region, while showing progress towards attaining and maintain the 1-hour state ozone standard. The District will continue to work closely with those local and regional agencies that are charged with responsibility for managing growth and transportation planning, and will continue to do so in order to meet its charge of protecting public health and the environment from the effects of air pollution.

October 25, 2005

Ms. Suzanne Bourguignon
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

SUBJECT: Bay Area 2005 Ozone Strategy
Draft Environmental Impact Report

Dear Ms. Bourguignon:

City of Sunnyvale staff thank you for the opportunity to review the Draft Program Environmental Impact Report for the 2005 Ozone Strategy. City staff has the following comments on the Draft:

1. Page 3-100, Noise Impacts, Project-Specific Mitigation – It should be noted that local agencies often have no control over agencies operating rail service, and these agencies in turn do not have legal responsibility for mitigating noise levels or attenuating high noise levels from increased operations. This may mean the noise impacts from increased rail operations should be considered significant and unmitigated. The City of Sunnyvale certainly encourages the Bay Area Air Quality Management District to advocate for noise attenuation to accompany any increases in rail service that provide positive air quality benefits. 5-1

2. Page 3-106, Public Services – The analysis of impacts seems poorly developed. Given that the Ozone Strategy encompasses regulatory actions that can be imposed on public agencies, there is a strong likelihood that agencies would need to adopt new programs, policies, and procedures to comply with the strategy. These programs and policies will require changes to services. For example, the City of Sunnyvale recently participated in the construction of a new rail station. Construction of the station resulted in new, significant, unfunded responsibilities for maintenance of the station that resulted in reduction of services in other areas. Implementation of many of the TCM's will have impacts on public services. 5-2

3. Page 3-111, Transportation and Traffic Impacts, Table 3.16-1 – For TCM 20, Traffic Calming, diversion of traffic to other streets is identified as an impact. Diversion of traffic in and of itself does not constitute a significant impact unless that diversion violates a level of service threshold or an adopted policy regarding traffic diversion, or, as the document's significance criterion states, causes "...an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system." . It is common practice for transportation engineers to consider the effects of traffic calming on traffic patterns prior to implementation, and typically traffic calming is not recommended when significant diversion is a possibility. It is incorrect to assume that traffic calming would automatically or even frequently cause diversion at the level of a significant impact. Traffic diversion should not be listed as a potentially significant impact in this document.

5-3

4. Page 3-113, Transportation and Traffic Impacts, TCM 9 – The nomenclature used in this explanation should be corrected to recognize that bicycles are legally defined as vehicles. I believe the author is referencing *motor* vehicles. It is unclear on what scientific basis the conclusion that potential conflicts between bicyclists and motor vehicles could increase. I do not believe that there is solid documentation that provision of improved facilities for bicyclists increases conflicts. There is considerable documentation that provision of bicycle facilities increases the awareness of motor vehicle drivers to bicyclists in the traffic mix, and there is also documentation that provision of comprehensive bikeway networks increases the mode share for bicycling. Bikeways also increase the predictability of bicyclists in traffic. Increasing the mode share may create the perception of increased conflicts, but it does not necessarily increase the rate of conflicts. Also, physical separation of bicycle and vehicle lanes runs contrary to specific guidance of the California Department of Transportation Highway Design Manual, which states "raised barriers...shall not be used to delineate bike lanes." I do not believe that there is a potentially significant impact for increased conflicts between bicycles and motor vehicles from TCM 9.

5-4

Once again, thank you very much for the opportunity to provide input on this document. I can be reached at (408) 730-7330 with any questions or comments.

Sincerely,

Jack Witthaus
Transportation and Traffic Manager

COMMENT #5

Jack Witthas
City of Sunnyvale
October 25, 2005

Response 5-1

Comments concerning noise impacts are noted. The development of new rail, ferry and freeway lanes are in the early planning phases so it is feasible to site the rail lines, ferry terminals and roadways in a manner that could minimize noise impacts and reduce land use and noise conflicts on sensitive land uses. Further, the use of physical barriers represent feasible mitigation to noise impacts and should be used where applicable (i.e., where there are the potential for significant noise impacts). The mitigation monitoring program will be used to monitor compliance with the mitigation measures.

Response 5-2

Per the CEQA guidelines, impacts on public services are considered significant if they would result in new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, or other public services. No such impacts were identified. The physical construction of rail facilities and other transportation improvements were considered in the EIR. However, no other physical impacts that could generate significant environmental impacts were identified, e.g., require new fire stations, police stations, schools, etc.

Response 5-3

Note that the conclusion of the impact analysis was that some control measures in the 2005 Ozone Strategy could encourage higher traffic densities in localized areas (e.g., TCM 1, TCM3, TCM 4, TCM6, TCM 7, TCM 11, and TCM 15). No significant traffic impacts were identified for TCM 20.

Response 5-4

The description of TCM 9 will be modified to refer to motor vehicles, and not just vehicles. The document is written in layman's terms and is not using a legal definition of vehicles as including bicycles, but the plain English definition where motor vehicles are generally referred to as cars, and bicycles mean bicycles (not motor vehicles).

In general, the higher the concentration of bicycles in an area where there are motor vehicles, the higher the potential for accidents (or conflicts). Improved bicycle facilities and dedicated bike lanes would minimize such potential increases. Note that no significant adverse traffic impacts were identified for TCM 9.

Draft EIR Comments from Ozone Strategy Public Meeting

Ozone Working Group Meeting, October 25, 2005:

David Schonbrunn (TRANSDEF) – This EIR is an improvement over past EIRs. However, this is a faith-based environmental protection document in that there are a number of references to the need to reduce VMT and promises that this plan will accomplish that but there are no numbers to back it up. This is completely unheard of and totally unacceptable.

1. There needs to be documentation of the effectiveness of the measures that you include here to reduce VMT, so that we can evaluate them. 6-1

2. Alternatives analysis is not adequate. A discussion of the options that were screened out is missing. It would be useful if the EIR listed all of these screened out alternatives and sorted them for the reasons why they were removed from consideration. If some were eliminate as infeasible or if it was a judgment call, the list should note that. Part of the discussion should identify the feasibility criteria and marginal costs-benefits of rejected alternatives. Need to include the cost-effectiveness for included measures in an alternative and what the marginal cost burden would be to implement those measures and then look at the results for emission reductions and health benefits. Identify what basis was used for determining the EIR alternatives. District should group measures according to their reason for rejection (e.g. cost, legislative barriers) as well as corresponding benefits. This would make the alternatives analysis more meaningful and would give policymakers a choice because you don't do that now. 6-2

3. EIR asserts there are greater land use trends responsible for the loss or conversion of agricultural lands for urban development. However, the Ozone Strategy functions as a de facto regional plan. Therefore it is misleading for the EIR to operate under the assumption that land use changes will occur irregardless of the Ozone Strategy. There is no separation or conflict between reducing ozone and improving the future of the Bay Area. 6-3

Ozone Strategy Community Meeting, October 26, 2005:

No public comments on the DEIR.

COMMENT #6

Draft EIR Comments from Ozone Strategy Public Meeting
October 25, 2005

Response 6-1

See Response 4-22.

Response 6-2

See Response 2-14. The alternatives rejected as infeasible are discussed in section 4.2 of the EIR.

Response 6-3

Land use changes can be influenced by the Ozone Strategy and the impacts are discussed in Chapter 3. The 2005 Ozone Strategy and other air quality programs generally provide a reduction in emissions from stationary and mobile sources providing a regional air quality benefit. The impacts of the 2005 Ozone Strategy on agricultural resources are considered to be less than significant as no control measures are expected to impact agricultural lands or require the conversion of agricultural lands to non-agricultural resources.

November 22, 2005 Received by E-mail

Suzanne Bourguignon, Principal Environmental Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Ms. Bourguignon:

This letter is intended to provide our response to the request for comments on the Draft Bay Area 2004 Ozone Strategy (Draft Ozone Strategy). Staff apologizes for the late date with which we are submitting our comments, but sincerely hope these comments will be considered as part of the review process.

Staff originally provided comments on the Notice of Preparation for the Draft Ozone Strategy on April 26th of this year. Based on our review it does not appear that the mitigation measures, and alternatives, to the TCM's which staff suggested were fully studied or included in the plan. Please let us know if this interpretation is accurate.

Should our interpretation be determined to be correct staff would like to suggest that our original comments and suggestions be reevaluated for inclusion in the final version of the Ozone Strategy (see attachment). For your convenience staff has summarized the mitigation measures or alternatives to the TCMs below:

- The Air District should examine the ability of Developer-based trip reduction ordinances to mitigate the secondary environmental effects of land use and development. If analysis shows such ordinances can be effective, they should be included in the Draft Ozone Strategy.

7-1

- The Air District should evaluate the potential to increase the ability of TCM 8 (Construct Carpool / Express Bus Lanes of Freeways) to mitigate additional environmental effects by changing the existing and proposed High Occupancy Vehicle (HOV) facilities to have a standard occupancy requirement, on both the Bay Area Bridges and the roadways. Currently the standards vary, which may discourage some motorists from using these facilities to their full potential.

7-2

Staff maintains that the Air District should carefully study all feasible mitigation measures, and alternatives to, the TCM's proposed in the Draft Ozone Strategy. This response is provided to support preparation of the complete Ozone Strategy which includes all actions necessary to support public health by the reduction of traffic congestion and subsequent improvement to air quality in the Bay Area.

Sincerely,

Hillary P. Heard, Transportation Planning Division

Attachment

c: S. Goetz, CDD

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(925) 335-1278

April 26, 2004

Joseph Steinberger, Senior Planner
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Dear Mr. Steinberger:

This letter is intended to provide our response to the Notice of Preparation for the Bay Area 2004 Ozone Strategy (Ozone Strategy). It includes our comments and input regarding the information that should be included in the scope of the environmental analysis for this project. Staff would also like to express their continued interest to study efforts that have the potential to alleviate both traffic congestion and improve air quality and the public health of Bay Area residents.

It is our understanding that the environmental analysis will study the effectiveness of the Ozone strategy to evaluate both the enhancements to existing TCM and the evaluation of new TCM's, as part of the attainment to the California ozone standard. Additionally the Ozone Strategy will review new TCM's that would replace, and still meet the requirements of, TCM 2 as part of the effort to meet the National 1 hour standard. The County is particularly concerned about the secondary impacts from the proposed revisions to the TCMs. For instance, TCM 3 through 8 provide additional transportation capacity (more rail, bus and HOV facilities) which will support the continued conversion of land to higher intensity uses and impact our natural resources. The Draft EIR should examine the mitigation measures or alternatives to the TCMs proposed the Ozone Strategy that can reduce these secondary effects.

- The Draft EIR should examine the ability of Developer-based trip reduction ordinances to mitigate the secondary environmental effects of land use and development by enhancing the ability of TCM 15 (Local and Land Use Planning and Development Strategies) to further improve air quality. Currently the proposed TCM has the ability to affect land use and planning strategies by addressing the need for local governments to respond to air quality impacts in their jurisdiction by incorporating air quality elements within their General Plans. However, within the proposed TCM there currently is no discussion of encouraging localities to draft Developer-based trip reduction ordinances as part of their planning and development strategies and General Plan policies. Trip Reduction Ordinances have the ability to mitigate several air quality impacts by providing the jurisdictions ability to impose requirements on a developer or property owner to integrate practical facilities (that facilitate walking, bicycling and transit use) and services to the development of their site.
- The implementation of such requirements outlined in the ordinance is a feasible method with which local governments can implement air quality

improvements within their General Plan policies. The addition of trip reduction ordinances within the measures addressing land use and development strategies further illustrates the connection between land use, transportation and air quality. The ability of such measures to significantly improve air quality provides the Air District with reasonable authority to implement such measures and/or support other agencies in implementing and monitoring them as part of the Ozone Strategy should those agencies be deemed responsible for such measures.

- The Draft EIR should evaluate the ability of TCM 8 (Construct Carpool / Express Bus Lanes of Freeways) to further mitigate the environmental effects of this measure to improve air quality. The proposed TCM should evaluate the ability of existing and proposed High Occupancy Vehicle (HOV) facilities to have standard occupancy requirements, specifically on Bay Area Bridges and the roadways. Currently TCM 8 discusses the air quality impacts of new HOV lane construction on regional freeways and expressways. However, the measure does not identify the potential air impacts that could be feasibly mitigated by coordinating the operation of existing HOV bypass lanes at the toll plazas of Bay Area bridges with the occupancy and time restrictions of the existing or funded HOV lanes feeding into these toll plazas. The existing HOV occupancy requirements on Bay Area bridges vary with their adjacent HOV lanes at several locations. This variation in occupancy requirement and time restrictions between the road and connecting bridge facilities could potentially adversely impact the ability to reduce mobile source emissions by making it difficult to encourage car/vanpooling in the Bay Area. Therefore the Air District should give serious consideration to revising the occupancy requirements and time restrictions governing the HOV bypass lanes at the toll plazas of Bay Area bridges to match the requirements of the HOV lanes feeding into these toll plazas. This would serve the dual purpose of creating a seamless connection of regional HOV facilities and mitigate the production of nitrogen oxides (NOx), one of the main ozone precursor emissions.

The Air District should carefully study the all feasible mitigation measures and alternatives to the TCM's proposed in the Ozone Strategy. The Air District should take actions within its power to implement such mitigation measures and alternatives and encourage other responsible agencies to take actions that could and should be done in support of the Ozone Strategy and in support of the public's health. This response is provided to support preparation of a complete and adequate EIR for the Ozone Strategy.

Sincerely,

Hillary P. Heard, Transportation Planning Division

c: S. Goetz, CDD

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COMMENT # 7

Hillary P. Heard
Contra Costa County
November 22, 2005

Response 7-1

TCM 15 includes the following text which responds to the commenter's suggestion: "Cities and counties are encouraged to require developer-based trip reduction programs." This text was added during the preparation of the 2005 Ozone Strategy in response to this commenter's April 2004 letter.

Response 7-2

TCM 8 includes a statement that the Bay Area should consider moving toward a consistent region-wide set of operation hours for HOV lanes, which would correspond to the current maximum spread of 5am to 10am and 3pm to 7pm. An encouragement of consistency of vehicle occupancy requirements would generally be air quality beneficial if consistent occupancy requirements were made higher than existing requirements (such as 2+ to 3+). TCM 8 includes a statement that "an increase in vehicle occupancy from 2+ to 3+ would normally be considered after other feasible corridor management strategies (Express Bus, expanded CHP enforcement, ramp metering, etc.) have been deployed."